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MARYLAND

DEVOTED TO
AGRICULTURE, HORTICULTURE,



FARMER:

LIVE STOCK
and RURAL ECONOMY.

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Farm Work for September.

The reports from all quarters of Maryland give flattering crop reports for this year. Wheat has proven a large crop—making a large average yield over that of former years. Once the crop in this State did not yield an average of 10 bushels; now it may safely be put down at from 15 to 20 bushels per acre. Many are the returns this year of over 35 bushels on large areas, and some have gone over 40 bushels per acre. The area of this crop has also greatly increased and all is owing to the extra care attending the selection of good seed, preparation of the land, methods of sowing, and liberality in fertilizing with such fertilizers as are suitable to the wants of the soil to which they are applied. The corn crop, tho' planted late, owing to a late, wet and cold spring, has, under genial weather of a warm and wet summer, excelled all expectation, and bids fair for an unusually large product.

Tobacco has decreased in area, and in consequence more attention is given to it in all its stages, and one acre produces more money than *two* did in former times. Smaller productions of the several market crops, such as potatoes, fruits, &c., are abundant, and on the whole the farmers of the State have a great deal to be thankful for, while in some sections it is to be regretted that excessive rains and storms have done great damage to all crops, to the public roads, bridges, &c., and in a few instances, to individual enterprises. Yet, notwithstanding the many drawbacks and casualties, such is the present position of the agricultural outlook, we may sincerely congratulate our farmers upon their bright prospects as to full remuneration in production, but must prepare them for reduction in prices of grain crops owing to this super-abundance in this happy land of the United States.

Tobacco.

It is to be presumed that the crop needs no more work now, except to keep it clean of

worms, top and sucker. We again urge, as important, to top low, say down to 14 leaves and top early; keep the suckers close cut, that the whole vitality of the plant will go to make long, broad leaves. Such tobacco is easier stripped, and will bring double the money in the market. A plant with 12 leaves, every leaf of same length and breadth, not less than 2 feet broad, and 30 to 40 inches long, will weigh as much as two or three plants not topped until in bloom, then topped to 18 or 20 leaves, and afterwards suckers left to grow a foot long—the whole or nearly all the strength of the plant wasted in the production of stem and suckers. They understand the economical and most profitable way of growing tobacco at the North, better than we do at the South, strange to say.

Rye.

Sow your rye among the corn as soon as possible, if you did not do so at your last working of the corn. If your corn will admit of it, that is, just past the roasting ear stage, and has not been blown about, sow your rye, and put it in with the cultivators sowing clover and timothy at the same time. The cultivator will not put the grass seeds in too deep. This we know from experience. If not convenient to sow as suggested, and you wait until the corn is cut off, then fertilize well the ground, and put in your rye, with double shovel plow. It has become manifest that the use of fertilizers suitable to the different crops, are indispensable to the production of large crops. Should drought or other causes prevent their full action, they lie in the soil to be of great benefit to the grass or succeeding crops.

Stock.

Salt and ashes in equal parts should be freely given your stock this month. Feed all the fallen fruit, before it decays, to your hogs; this will help the hogs and destroy thousands of insects that otherwise would be a prey upon your fruit next year. We look upon this as a work of

necessity on every farm. Look well to the young calves and the colts that are weanlings. let them have a little grain or bran and shorts or oats daily, plenty of pure water and a lot of fresh young grass. After weaning, they will lose flesh and be stunted in growth, unless they have extra care given them for a while at least.

Tops and Blades.

We would not call it good husbandry to blade and top all your corn, but if you are scarce of good hay, secure enough of this provender, so palatable to all stock, for your choice calves and colts for the winter. As soon as cured put them under cover. The tops should be cut in dry weather, allowed to lay and be sunned for a day or two, and then tied in small bundles with withs of the smaller stalks. They are thus easily handled and fed out without waste, and in half the time.

White-Washing.

Cleanse and white-wash all cellars, corn-cribs, out-houses, poultry houses, &c.

Draining.

This is a good time to drain all the wet spots in your fields, either by open or blind ditches.

WHEAT.

We consider the cultivation given tobacco prepares the land well for wheat, which it is admitted, ought to have clean ground for its reception. But, of course, well prepared fallow is superior to any other. The best soil for wheat are clay soils, or loam with clay predominating; having, if possible, a clover lay, which had been closely depastured by cattle and then by sheep, but if the growth of weeds or grass be high, and designed to be turned in as green manure, the field should be plowed in time to let this green growth be well decomposed before the wheat be sown.

FALLOWING FOR WHEAT.

Commence to fallow early and continue until the work is done. If a clean sward, plow only three or four inches deep, unless the land be stiff, then plow deeper. If the land be foul, plow deep enough to cover the growth turned under. Harrow every morning all the land plowed the day before, harrowing the same way it was plowed. After this, keep the land clean of any vegetation by harrowing and cross-harrowing—Smoothing Harrows the best for this purpose—until it is time to sow; thus the land will be in nice order, and furnish a clean, soft bed for the seed, without the cross plowing usually done, which we disapprove of, believing that the turf turned under should not be disturbed, and that the land, by frequent harrowing, will be put in

better order than by cross-plowing and turning up the half-rotted turf; while, if the land had a heavy crop of green vegetation on it, the harrowing, by keeping it close covered, would cause it to more rapidly decompose and become food for the young plants, and be so compacted that it would be less friable, and the wheat less liable to be thrown out by the frosts of winter.

TIME OF SOWING.

It seems to be generally thought by the most successful wheat growers, that the best time to sow is between the 25th of September and the 10th of October. Light lands may be sown later.

SOWING WHEAT.

Wheat should be drilled in at the rate of 5 pecks per acre, about 2 inches deep. No matter how rich the soil may be in vegetable mould, we would advise the application of 100 to 300 lbs., according to the state of fertility of the land, some fertilizer containing potash, soda, lime, sulphuric acid and phosphoric acid. Wheat requires much silica and nitrogen; which last, Dana says, "measures the value of manures." There must be present in the soil sufficient *mineral* as well as vegetable manure, and also, there should be a due proportion of animal manure, to produce a large yield of this grain. These fertilizers may be drilled with the wheat and grass seeds, or they may be sown broadcast at the last harrowing, before the wheat is sown, but we prefer to let them be applied with the wheat. The young plants get a quicker benefit from them, the fertilizers being concentrated about the young roots, the plants are stimulated into an early growth.

After seeding, we would advise 1 bushel of plaster to two of salt, well intermixed, or much more salt, say 6 bushels, if the farmer could afford it, per acre, to be sown broadcast.

No one kind seems to suit all sections of the country, and all have been famous at times, but the *Fultz* seems to be a popular wheat, and no doubt is a superior sort if it can be got pure, but there lies the difficulty. There are several new varieties which should in a small way be tested by our farmers.

There is no doubt that every farmer should change his seed wheat at least every two years, that is he should get a new variety or some of the same kind from another locality. It is a good plan for two or more neighbors to purchase each a few bushels of different sorts that are reported to have yielded well, and sow enough of each variety to furnish themselves, at least, with seed for the ensuing year, providing it proved worthy.

Garden Work for September.

There is not much work to be done in the garden during the month of September, beyond keeping the ground free from weeds and grass, and giving good attention to the culture of the flowers and shrubs in the flower garden. The lawn and grass walks ought not to be mowed after the 20th of the month. It is best not to cut the grass too late in the season, except where it should make unusual growth, because of the richness of the soil and the favorableness of the weather.

Lima Beans and all other Beans.—Gather Lima beans, pole and dwarf or snap beans as soon as they are ripe, dry a few days, then shell them, and, if quite dry, put them in barrels or bags.

Radish.—Sow beds of the white turnip radish and the Spanish, and a supply of pink or white Chinese, which will give a supply for winter, being treated just as you treat the white turnip, both in culture and preservation during winter.

Celery.—Begin to earth up celery for blanching.

Endives.—Set out plants early this month.

Turnips.—Thin out and keep clean of grass the growing turnips. It is not yet too late to sow turnips on rich, well-prepared land.

Herbs.—All pot and medicinal herbs may be planted in moist weather.

Small Salading.—All kinds of small salading may be sown early this month.

Lettuce.—Set out plants, and sow seeds in frames for winter and spring use.

Siberian Kale.—Prepare a bed, with southern exposure if possible. Make it rich, rake well, sow the seed about as thick as you would turnips broadcast. Rake the seed lightly in, roll or pat with the hoe or spade, and then strew over it ashes 4 parts, plaster 2 and salt 1 part. It will require no more attention. Light dry soil suits this excellent vegetable best. It is much admired as early greens, and comes in from jowl time, February, and lasts until late spring.

Spinach.—Be sure to sow seeds of this superior vegetable on a bed as prepared for kale, and sow in drills ten inches apart, one inch deep; cover the seed with back of the rake, and pat down the ground over them. When the leaves get one or two inches broad, thin and weed, stirring the ground well.

Cauliflower and Broccoli.—Keep these clear of weeds, the ground light, and in dry weather give them a liberal watering every third evening at sunset; not a sprinkling, but a real good supply that will reach the roots. Sow seeds of these

splendid members of the brassica tribe about the 5th to 10th of the month, and they will in six weeks be ready to transplant in cold frames, 4 or 6 inches apart, for setting out early next spring.

Cabbage.—Make a bed rich and put it in fine tilth, and sow early York, large York, large sugar loaf, and Winingstadt cabbage. Sow in drills 4 inches apart, or broadcast, divide the bed in squares and mark with sticks labelled, so as to keep each kind separate, and you will have a regular succession next spring and early summer; they will head in the order named. If the fly attacks them dust well with soot 9 parts, and 1 part sulphur, when the dew is on; ashes, plaster, &c., are also used for dusting. If the weather be dry, water with a fine nozzle watering pot until there is rain.

Weeds.—Kill, and war upon all weeds.

Lancaster County (Pa.) Farming.

At the Lancaster Farmers' Institute meeting in June, Dr. Loring, Commissioner of Agriculture, was present and delivered an address, in the course of which he said: "The State of Pennsylvania presents a picture of enterprise and prosperity, especially among the farmers, second to none presented anywhere under the sun. The gentleman compared the farmers of America with those of European countries, and said that while we hear a great deal about the farms in France, there is not a single farmer present who would accept in a single instance the condition of things on a French farm. The same may be said of the farms of Germany, England, Italy, China and Japan, in the last two of which he said a Lancaster county farmer would not stay fifteen minutes. He said there was no such thing outside of America as popular, practical, prosperous farming.

"The business of farming—on which the State is living to-day—is the supply of a local market, and covered with railroads, as Pennsylvania is, there is no wonder that it is classed as one of the best farming districts for home consumption in the country. Take all the crops that are sent into a market rapidly, such as small fruits, and there is no question of the profits that will be reaped. It is more profitable to raise articles for a home market than it is to raise staples for a foreign market. The boom of American farming is one that cannot possibly be enjoyed anywhere outside of the bustle and whirl of the American life."

Beecher on Farmers and Farming.

While we are not believers or followers of all Mr. H. W. Beecher's teachings, yet we are free to say that he is a remarkable man and eloquent speaker, touching no subject that he does not illumine and illustrate most happily and instructively by quaint ideas, original thoughts and terse, beautiful sentiments. In an address lately before the Storrs' Agricultural School at Mansfield, Conn., he gave his boyhood experience in farming and spoke freely of old time agriculturists, together with practical advice, in his peculiar humorous way, which always wins the attention of his captive auditor or reader. We would like to furnish the whole, but our space allows us only to give some extracts from this able and eloquent address, as follows:

"In my boyhood, the way used to be, if a boy was pretty smart, to send him to college to make a lawyer. If he was a little dull, they made him a doctor. And if he was good for nothing, they made a minister of him. [Laughter.] But times have changed; the farmers are better, in some things, than they used to be; they comprise our most important class; I think I have heard somebody with great originality, call them "the bone and sinew" of the country. Bone and sinew is good, in an ox or a pig; but in men the marrow also counts for something. A man with a sound body, powerful bones, muscles, and sinews, is good to see; but he needs to have some better use for his head than a thing to hang his hat on. He has to think, if he is going to farm it in New England. As a man, I advocate the education of the farmers. Men have said, "Why send your boy to college, when he is to become a farmer?" Now the great end of all education is that a man shall be a man, that he shall be fully informed no matter what his calling may be, if it be to run a farm or a factory, or to pick up a pin, he should be an educated man. If he is going to be a farmer, it is really necessary that he should be an educated man.

AN IGNORANT MAN

is a one-bladed knife. A man who knows more, and is naturally smarter, but con-

finied to one thing so far as education and practice goes, is like a many-bladed knife that is rusty and only one blade used. A man has the right to use every part of himself. It is as necessary in farming to be quick witted as it is in engineering, or even in politics. The farmer is the fundamental element of society. Our cities depend on fresh material from the back farms. Without that they would all run out. City life doesn't give that breadth, and strength, and continuity, that the life on the farm gives. But the farmer should be educated, because to a large extent he determines our laws and our policies as a people. He should be able to be a competent *reading* man. All these reasons make it necessary that he should be educated. Farming now demands more knowledge, thought, and ingenuity, than it did in our fathers' day.

"FANCY FARMING."

"A gentleman must have two stores in the city to support one farm in the country. He has fancy barns, fancy stock, fancy poultry, fancy stone walls. I am one of 'em. It takes six months of lecturing to pay for six months of farming. Plain farmers laugh at all this. But, after all, it is a good thing, for men with money may thus show farmers without money how such things can be done. Since I came to Peekskill every farm around that neighborhood has increased in market value 25 per cent. They have better farms, better stock. The fancy farmer is the fool that makes all the neighborhood wise. Let us speak kindly of the fancy farmer.

"If a harness breaks, or the wagon or the plow needs mending, the young man on the farm should know how to do it. Farmers' boys should be brought up to learn the practical side of everything.—That's the secret of a full-developed character.

He can be a farmer if he chooses—or take to the life of books—or he can go into politics or into speculation—and if not that, still the state has a place left, at Sing-Sing. [Laughter.] It is notorious that the Yankee possesses versatility of talent. The Southerners used to say, in former days, that a Yankee would pinch a six-pence till it squealed. Yes—but he pinched the soil first, and paid honestly for all he had, whereas down South it was slaves who pinched the soil and it was the plantation owners that spent the proceeds in New

York and became bankrupt. * * *

"THE FARMER OUGHT TO KNOW what the air is that he breathes—what makes its heat and its moisture—what are the laws of its changes and its storms—and all that goes on in this great invisible realm. He should learn to know every plant—and every rock—and ever lichen; he should know every bird that flies in the air; these things should be familiar to the child. I will venture to say that three-fourths of you cannot tell what the bird is that sings. It is a shame! The child should know the geology of the region around him—it should be a part of the common knowledge of the household. I suppose that as far as your scientific knowledge goes, nineteen-twentieths of you can tell a robin, or a crow, or a Canada thistle—but as to knowing what God has put into the air, the fields, and the woods, how many of you have any knowledge?

"OUR HOLY BOOK.

tells us that the fear of God is the beginning of wisdom. It is only the beginning. Real wisdom is laid on the foundation of a knowledge of the truths of the world around us. First get the knowledge of this world, the laying of a solid foundation on which to rear the ethical principles of religious understanding later. And this principle conforms to the rule of the formation of the brain; its basis belongs to the physical part of life.

"Consider how much in another direction the farmer ought to know. The farm is a vast chemical laboratory. You put in the seed, and then seek to bring about it those chemical elements that make for the harvest. Or, to change the figure, it is a great manufactory—with all the looms and spindles ready. Now what do you think of a man who had a laboratory 100 feet square, and who fenced off 20 feet in one corner for use and let all the rest go?—let it go without yielding a cent? That is what I think of a farmer who has three times as much land as he can use and improve. What do you think of a gigantic factory that had no capital to run it? Farmers in New England own more land than they can do justice to. It is dead capital. They work a little part of it, and all the rest is dead waste. You should calculate as manufacturers do; find out how much you can profitably use, and own no more; settle that and then go ahead. He needs then to have the know-

ledge of a manufacturer—and a merchant; where he combines his faculties he is a man!

HE SENDS HIS SONS AND DAUGHTERS

to school, the sons to make, perhaps, builders, merchants, lawyers, politicians, or even a governor. [Applause.] All kinds of knowledge finds a place on the farm. It is an old saying that "the best manure is the farmer's foot," but the farmer's brain is better. * * *

"The Duke of Athol has 20,000 acres in Scotland, a tract that was almost worthless when he took hold of it; he now makes a ducal income out of that vast estate.

"The day is coming when timber is going to be timber, in New England. It is said that he that plants forest trees plants for posterity; and the same thing is said of pears. I never planted at Peekskill any pears till after I was fifty, and I have picked pears for the last ten years. If a farmer is fairly intelligent and industrious and abstains from whiskey he will prosper and his children will rise up to bless him.

ANOTHER THING.

"You need to have finer stock. And of all stock the noblest is the horse. Not, perhaps, as profitable as the hog, but a great deal better. New England has a reputation for good horses, but we can do a great deal better. When I go into a town I like to see good churches, fine monuments, solid public buildings; but I go also into the side streets and see how they are drained—see *how the folks live*; and then I look at the horses. If the draft horses are large and sleek—if the people live well and have good horses—God lives in that town. These things are an index, an internal evidence of that fact."

VALUE OF ANIMAL MANURE:—It has been demonstrated by careful analysis of the mixed voidings of cow, horse, sheep and pig, that 83 per cent. of the nitrogen contained in the food eaten is voided in the manure, and over 95 per cent. of the potash and phosphoric acid.

DAIRYMEN GETTING RICH —Progressive dairymen who are only satisfied with the best results, are adding to their wealth and conferring a benefit on society, by the rapid improvements they are making in the art of butter making. This class use Wells, Richardson & Co.'s Improved Butter Color, and know by actual test that it fills every claim made for it.

For the Maryland Farmer.

What the Farmer has to Contend with.

There is no occupation in which man is engaged that requires the exercise of better judgment than that of farming. It has always been so, and will always continue to be so, so long as conditions exist over which the farmer has no control. In the spring he may plow his ground, prepare it for the seed, and plant his crop, which may germinate and start with a promise of a bountiful harvest, and the frost come in a single night and cut off the entire crop. This is a condition, that, while it may be expected its time cannot be fixed. Again, crops may be planted and their cultivation pursued until by a combination of atmospheric conditions, a hail storm occurs when the crop is ruined if not totally destroyed. Or still, again crops may be destroyed to a great extent by severe winds or cyclones. Nor is this all; crops that are ready for harvest may be practically ruined by severe and protracted storms that cannot be anticipated. Early fall frosts may also prove very destructive to crops that are still immature, and so a long list of conditions may be named, of simply a climatic character, that cannot with any certainty, be foretold or anticipated that work to the great injury of the farmer and for which he must provide as best he may, and yet there are many who believe that the farmer has only to prepare his ground and put in the seed, in order to be insured a bountiful harvest.

But climatic obstacles are not the only ones that the farmer has to contend with, as every farmer too well knows. Years of experience have taught him the insect enemies with which he has to contend are almost innumerable. There is scarcely a cultivated crop that grows but that has its multitude of insect enemies, seeking its destruction from the time the seed is placed in the ground until it is finally disposed of or consumed. The same is true of all kinds of fruits. And even the stock upon the farm is subject to disease or injury at a time when least expected, and so every thing combines to bring into exercise the best kind of judgment. And notwithstanding there is enough to discourage the strongest hearted, the farmer labors on from day to day and from year, enduring

the heat of summer and the cold of winter, "whistling as he goes."

If he is favored and secures a plentiful harvest he is thankful and lives in the enjoyment of the good things which he has provided "in the sweat of his brow," or if overtaken by disaster is still thankful it is no worse, and by the exercise of frugal economy looks forward with buoyant hopes for the approach of the next season, when, by renewed energy, he can, if favored by Providence, still reap plentifully.

It is almost universally the rule that the farmer is willing to meet all the atmospheric conditions philosophically, and to continue from year to year to wage war with the insect enemies without any special complaint. When a farmer becomes entirely disheartened it is certain there is something wrong. WM. H. YEOMANS.

Columbia, Conn.

Compost.

The report of the Connecticut Experiment Station gives the following directions for composting dead leaves, in answer to an inquiry for the treatment with lime of a mass of leaves which had drifted for twenty-five years behind a wall. The answer directs the use of fresh slaked lime, one bushel to every fifteen or twenty of the leaves and dark loam lying beneath them. One bushel of lime is recommended for ten of swamp muck. Twenty bushels of the leaves and muck are to be first spread three inches deep, then a bushel of lime warm from the slaking sprinkled over this layer. Then the process is to be repeated till the heap is several feet high. The heap may remain through the summer, and be mixed by cutting down and shoveling over. If a bushel of salt (to six bushels of lime) be dissolved in water, and the brine used to slake the lime, the action will be more rapid, and a few weeks be long enough to set up a decomposition, when the heap may be overhauled, and will be ready to use in a few weeks more. Instead of salt, muriate of potash will answer, and will supply indispensable potash to the crops. It is on account of the formation of soda and carbonate of soda from the lime and salt mixture that this mixture exerts a more powerful decomposing action than lime alone. When salt is cheap and wood ashes scarce the mixture may be applied to advantage.

Parks, Forests and Highways.

BY HON. GEO. B. LORING,

United States Commissioner of Agriculture.

(From a Fourth of July oration at Woodstock Conn., 1884.—Boston Herald's Report.)

Commissioner Loring said:— I have promptly consented to contribute my share to the entertainment of this occasion, because I think the day most appropriate for the discussion of all questions connected with the welfare and development of our country. Turning from the noisy rejoicing of the hour I am expected to call your attention to the delights of groves, the adornment of villages, the beautifying of highways, the management of parks and gardens, the planting of trees, the cultivation of the landscape; and I am invited to enter with you upon the crowning work of cultivated life, in which man endeavors to adorn and beautify that abode whose foundations he has laid on the substantial elements of state and society. The cultivation of parks and garden constitutes one of the most interesting and important duties of modern art; a duty in the faithful performance of which England has set us an admirable example. This science of landscape gardening, which advanced so slowly in the old world, and the proper system of constructing a city, with light and water and parks and shaded streets, which was so shamefully neglected there until a comparatively recent period, have, until within a few years, been entirely overlooked in our country. It was not until after the revolutionary war that the planting of trees and shrubs was made a necessary part of the laying out of gardens and grounds. I remember well the only garden in the State of Massachusetts laid out early in the century by an English gardener and kept in good order until within a dozen years,

AN OBJECT OF DELIGHT TO ALL

who were allowed to enter its sacred enclosure and perambulate its well vistaed walks. Such a scene as this was rare. Public spirited citizens planted avenues of trees in highways, and were considered benefactors; here and there a door yard was ornamented with clumps of lilacs and syringas; but nowhere that I am aware of, were there associations of enterprising and tasteful citizens, organized for the purpose of adorning their towns and of providing for the health and

comfort of themselves and the community of which they formed a part. It remained for our own generation to unite for so important and laudable a purpose. And I congratulate our country that its natural comeliness has been enhanced and its lands made delightful by the combined efforts of those who believe that a love of beauty is a human attribute, and that we are under a sacred obligation to preserve that health which is given us for a high and useful purpose.

The practical service of the landscape gardener is not necessary for me to discuss here in the presence of those who know by experience how trees and shrubs should be grouped; who have learned that an ever-green may well be transplanted in August and that a little lime and muck applied to the roots when it is planted will give it a wonderful stimulus, who understand that a plantation of trees should be made to suit the building it is to surround and the landscape it is to occupy; that trees should not be planted too near a building or too near each other; that the plants nearest the house should be low in stature and of a beautiful sort, that the shades of green should be properly blended and the foliage selected accordingly that

TREES SHOULD BE PROTECTED

by each other against those winds which are obnoxious to them; that the Norway will not bear the rough gales from the sea, and that the Scotch pines rejoice in them; that trees and plants should not be marshalled in regular order and at equal distances, like beaux and belles standing up for a quadrille or contra dances; that it is easier, as Downing says, to plant a tasteful park by planting new trees than by thinning out an old forest, and that nature is full of hints and suggestions, an observance of which constitutes the highest art of which man is capable in all that work of which earth, sea and sky form a part. After referring to the intimate relations which trees bear to remarkable events and illustrious persons in history, and the noble raptures that have been conceived while in the walks of and shades of trees. The speaker continued by saying that the judicious selection and planting of trees may be made one of the most profitable branches of agriculture. Not for the beauty of the town alone, but for a thrifty use of remote and deserted acres, also may the culture of trees be made a part of the business of

life. A venerable clergyman in Massachusetts, the father of one of the most distinguished bankers in Boston, left, at his death, a large territory of woodland in the town which was blessed with his ministry for more than fifty years; and the profits on this land, which he had purchased at a very low rate at the beginning of his professional service, and which had been devoted to the growth of wood, principally pine, were greater than those realized on land purchased and sold at the same periods in the most prosperous part of Boston. Of the utility of trees, when properly distributed along highways and in parks and squares, too much cannot be said. The improvement of the roads along which are borne the products of man's toil, and by which his social intercourse is facilitated, constitutes one of the most important practical steps in man's advancement. The highway may become an aid to man's business and pleasure, or it may be an obstacle in the way of both. A badly constructed road

MAY ISOLATE A COMMUNITY

and prevent that prosperity which nature intended, and which an industrious people, under fortunate circumstances, may achieve. The care and beautifying of our highways leads, naturally, to the construction and adornment of parks in our towns and cities. The distressing tales of plague and mortality with which the history of old cities abound, present a vivid picture of the pestiferous atmosphere of those confined, crowded ill ventilated, badly drained accumulations of buildings and men. The unhealthiness of an ancient, crowded town can hardly be estimated. The filth which accumulated in the narrow streets of old London was disgusting; the air which hung over it was pestilential; the streams which bore its foul collections along the gutters when drenched by rain were nauseating; the old London was a fair specimen of the great cities of its day. Crowded and badly arranged Liverpool and Manchester have a death rate nearly double that of the rural districts of England, and nearly three times that of some sections of our country; and in the latter part of the 17th century the death rate of London was almost four times as great. The absence of open areas and interior parks was sufficient to account for this calamity. In the days when Paris was a closely packed city, its death rate

was enormous, being 50 in 1000 in ordinary years. The overcrowded portions of New York, and other large American cities, suffer almost to an equal degree. The destructive influences of the impurities which, once gathered, are confined by narrow streets and high walls are appalling; so appalling that, in laying out a city, the streets which are to be the main channels of passage, should open towards the prevailing winds of the region. How different from the old is the building of a modern city! To build a city in defiance of street ventilation is now considered simply the creation of a resort for all sorts of debilitating and destructive diseases and a home for a sickly and enervated population. Everywhere, in town and in country, the

BENEFICIAL EFFECT OF FOLIAGE

on the health of the people is now recognized. For generations, the existence of a forest belt protected a portion of Rome against the ravages of disease. The virtues of the eucalyptus and the sunflower have been recognized in all the growing plants, and along all malarial and miasmatic places they are esteemed as purifiers of the poisonous effluvia of cities and the death bearing exhalations of swamps and morasses. In conclusion, the speaker said: To dress the garden and to keep it, was the first duty imposed on man when he entered upon his career on earth, and to dress the garden and keep it has been the desire of every man who, after long wanderings, has learned the point whence all his impulses sprang. The poor man seeks the soil. The rich and powerful believe in its refreshing influences and its repose. The industrial and frugal mechanics and laborers of our country all toil for a home and a spot which they can cultivate. The merchant of our day, like his ancestor in the early periods of our commercial history, when every prosperous man bought a farm, believes now in the delights of rural and suburban life. The law and custom of our fathers was a land holding clergy established for life in their parish ministrations; while from the farms and plantations of the colonies sprang the brave and hardy and wise men who gave us our freedom and founded our nationality, and to whom the sacred associations of this day, this anniversary of our declaration of national independence, especially belong.

Silos and Ensilage.

On six acres I raised ensilage corn enough to feed 29 cows for seven months with one feed of hay a day and one feed of grain to only the cows in milk. The stock never came out better in looks or health. Our silo is 33 x 15 feet and 12 feet, 7 inches deep. The only mistake we made was in building it too long. This year we propose to build another.—*A. G. Prentiss York county, Me., in homestead.*

The *Mark Lane Express*, of London, in congratulating its readers on the fact of Prof. John B. Lawes' announcement that he is going to build a silo, says: "If Sir John thinks the question is merely one of silage *vs.* roots from a feeding point of view, he is greatly mistaken. It is a case of silage *vs.* moldy hay and wheat which nobody wants; of cheap and heavy land deteriorating crops, and of stock-keeping *vs.* corn-growing." This is not only a wise statement of the case for England where root crops are the mainstay of cattle feeders, but it is particularly applicable to American farmers who cannot as a rule afford to grow roots, owing to the great cost for labor in working them. As much as we have traveled among the commercial dairymen of the country and noted their methods of farming, we do not remember a single instance of root-growing except with turnips, which are a kind of catch crop" that fails as often as it succeeds. Breeders of fine cattle raise mangolds and carrots, and usually have a number of extra hands to weed them, but the plain farmer seldom has time, with his short supply of help, to devote to this laborious crop.—*Dairyman.*

The evidence accumulates that the practice of ensilage of green fodder is entirely successful, and that all those cases in which objections have been made against it in regard to alleged injury to the quality of the milk and butter made from it, have been due to an improper preparation or use, and not from an inherent quality of the preserved fodder. It has been objected by some manufacturers of preserved milk and some dealers in butter that the ensilaged fodder produced an objectionable flavor. Admitting that these objections were well-founded, it seems that there was something

wrong in the treatment of the fodder and not in the process of the fodder itself, to which the ill flavor was due. This we have no doubt of, considering the abundant evidence from prominent dairymen who make fancy butter, that the quality of their product is not changed in any degree from that of the best grass butter. The color, flavor and texture of the butter made from ensilage are thus, in every respect, equal to those of the butter made from the best pastures.

This is more than can be said of butter made from dried fodder, and the claim is reasonable, because we know very well that grass, corn and other green forage lose some of their best qualities in the curing, while those preserved in the silo in a proper manner retain all these qualities. The necessary conditions for successful ensilage are simply the fine shredding of the fodder and the closest possible pressure to keep out the air. With sufficient pressure, wooden walls, even above ground, are sufficient for the silo.

Every year more and more farmers are venturing, and now that it is known that a silo need not be costly, and may, indeed, be made very cheaply, and that the cost of putting it up and using it is not so much as that of cutting, curing and using the fodder in the ordinary way, the number of farmers who will make use of this practice will increase more year by year.

One thing is certainly proved by experience with ensilage, and this is, that by its practice the product of fodder may be made equal to the feeding of one cow or one fattening steer for every acre of land cultivated; and this economy of the soil is equivalent to the pasturage or hay-feeding from six or eight acres, the gain is very great, and seems to solve the question of the profitable culture of the soil for dairying and beef feeding upon land whose high value would otherwise preclude its use for these purposes. HENRY STEWART.

SOLID COMFORT—Every one likes to take solid comfort and it may be enjoyed by every one who keeps Kidney-Wort in the house and takes a few doses at the first symptoms of an attack of Malaria, Rheumatism, Billiousness, Jaundice or any affection of the Liver, Kidneys or Bowels. It is a purely vegetable compound of roots, leaves and berries known to have special value in kidney troubles. Added to these are remedies acting directly on the Liver and Bowels. It removes the cause of disease and fortifies the system against new attacks.

New York Agricultural Experiment Station.

BULLETIN NO. LXXXX.

GENEVA, N. Y., July, 1884.

The striped cucumber beetle, *Diabrotica vittata*, is a pest well known to the garden. We have applied kerosene mixed with sand, an ounce to the pound, to the soil about the plants of cucumbers to prevent his ravages, but with little, if any, beneficial effect noted. Soluble phenyle mixed with sand in the proportion of one ounce to the pound proved almost instant death to the *Plants* wherever it touched them.

In order to test the influence of noxious odors in repelling the striped bug, we placed among the plants of a hill of squashes a few corn-cobs that had been dipped in coal-tar, placed a frame of mosquito netting over the hill and introduced a dozen or so of the bugs. The insects applied themselves to the leaves of the squash vines with their usual relish, and the following day we found that instead of the enclosed bugs attempting to make their escape through the netting, numerous visiting bugs were at the outside of the cover attempting to make their way in. The same result was noted as following the application of corn-cobs dipped in soluble phenyle, a liquid possessing a powerful odor resembling that of coal-tar.

The cabbage caterpillar, the larva of *Pieris rapae*, was effectually mastered by the use of Buhach powder applied with a bellows. We are making further trials in order to determine what degree of dilution may answer for successful use.

The asparagus beetle, *Cirocera asparagi* has made its appearance in the Station garden. We find Paris green applied in water, sure death to the larvæ, although neither this nor the kerosene emulsion seems to have apparent effect upon the beetles themselves.

The current worm, the larva of *Nematus Ventricosus*, succumbs readily to hellebore powder, when the application is made while the dew is on the plants so as to cause the powder to adhere to the leaves. Applied so as to adhere the application lasts for several days; the dust of the hellebore kills, however, very rapidly, the caterpillars with which it comes into contact, and the substance may be applied dusted from

a dredger, as soon as the young larvæ appear. Buhach powder in the dilution of a quarter of a pound to three gallons of water was but partially successful.

Buhach is the trade name for the pulverized flowers of *Pyrethrum cinerariaefolium*, now extensively cultivated in California. It is sold, put up in tin cans, and should be purchased in these original packages. Its use as an insecticide is highly recommended by our best entomologists, and it is certainly worthy of extended trial.

E. LEWIS STURTEVANT, Director.

DEEP PLOWING:—The question is often asked: "How does deep plowing make the soil moister?" I believe it is an accepted fact that wherever warm air comes in contact with a body cooler than itself the water in it condenses into drops. On a warm day we see it often on the outside of a pitcher of cold water. Fogs and dews are made in that way, and our rain, most of it, comes up from the gulf in those heavy currents of warm air that we frequently have. When we pulverize the soil deep the warm air, which is full of moisture, penetrates down and all through it, and the ground, being cooler than the air, condenses the water into drops, which answers in place of rain; so the deeper and the more we pulverize it the more moisture it will collect from the air. Not only that, but as warm air is rich in food for plants it serves in place of manure, too.

Thirty years ago there was a terrible drouth in the east. Professor Mapes, a large market gardener, had had his ground uuderdrained and subsoiled, and his crops, where he could, were cultivated with a subsoil plow. A committee went to see his place after nine weeks of drouth, and it found everything as flourishing as if there had been plenty of rain. His corn (it was the 3d of September) was estimated at ninety bushels to the acre, while on land cultivated in the usual way, near by, it was all burnt up.—*Kansas Farmer*.

MEN of all ages who suffer from low spirits nervous debility and premature decay, may have life, health and vigor renewed by the use of the Marston Bolus treatment, without stomach medication. Consultation free. Send for descriptive treatise MARSTON REMEDY Co. 46 West 14th Street, N. Y.

List of State and Local Fairs for 1884.

STATE AND INDEPENDENT FAIRS.

Name.	Place	Time.
American Fat Stock	Chicago	Nov 11-20
Arkansas Valley Asso.	Wichita	Sept 30-Oct 3
Arkansas [Southeast]	Monticello	Oct 15-18
Canada [Dominion]	Ottawa	Sept 25-27
Canada [Provincial]	Toronto	Sept 10-20
Canada [Western]	London	Sept 22-27
Canada [Fat Stock]	Guelph	Dec 15-20
Canada [Central]	Hamilton	Sept 30-Oct 4
Colorado	Denver	Sept 1-30
Connecticut	Meriden	Sept 16-19
California	Sacramento	Sept 8-20
Delaware	Dover	Sept 29-Oct 3
Georgia	Macon	Oct 27-Nov 1
Illinois	Chicago	Sept 8-13
Illinois	Chi. Ind. Exp.	Sept 3-Oct 18
Indiana	Indianapolis	Sept 29-Oct 4
Indiana [N. Ind. & S. Mich]	South Bend	Sept 22-26
Iowa	Des Moines	Aug 29-Sept 5
Kansas	Topeka	Sept 8-13
Kansas [Western Nat'l]	Lawrence	Sept 8-13
Kansas City Fat Stock		Oct 30-Nov 6
Kentucky	Lexington	Aug 26-30
Kentucky [Central]	Danville	Aug 5-9
Louisiana [World's Exp.]	N. Orleans	Dec 1-May 31
Maine	Lewiston	Sept 22-27
Maine [Eastern]	Bangor	Sept 9-12
Massachusetts [Hort'l]	Boston	Sept 16-19
Montana	Helena	Sept 8-14
Michigan	Kalamazoo	Sept 15-20
Maryland	Hagerstown	Oct 21-24
Michigan [Western]	Grand Rapids	Sept 22-27
Minnesota	Owatonna	Sept 8-13
Minnesota [N.W. Ind. Ex]	Minneapolis	Sept 1-6
Missouri [St. L. Fair Ass.]	St. Louis	Oct 6-11
Mississippi	Meridian	Oct 27
New York	Elmira	Sept 4-10
New Hampshire [N. E.]	Manchester	Sept 1-6
New Jersey	Waverly	Sept 16-19
Nebraska	Omaha	Sept 5-12
North Carolina	Raleigh	Oct 1-28
Ohio	Columbus	Sept 1-5
Ohio [Central]	Mechanicsburg	Sept 5-12
Ohio [Indus. Ex]	Cincinnati	Sept 3-Oct 4
Ohio [Southern]	Dayton	Sept 25-Oct 3
Oregon	Salem	Sept 15-20
Pennsylvania	Philadelphia	Sept 8-20
Quebec	Montreal	Aug 29-Sept 6
Rhode Island	Providence	Sept 22-27
South Carolina	Columbia	Nov 11-14
Southern Exposition	Louisville, Ky	Aug 15-Oct 25
Tennessee	Nashville	Sept 6-20
Texas	Austin	Oct 7-11
Tri-State	Toledo	Sept 8-13
Vermont	Burlington	Sept 8-13
Virginia	Richmond	Oct 22-24
West Virginia	Wheeling	Sept 8-13
Wisconsin	Madison	Sept 15-20
Wisconsin [Mil. Exp.]	Milwaukee	Sept 13-Oct 18
Wisconsin [Northern]	Oshkosh	Sept 8-12
Western Nat. Fair Asso	Lawrence, Kas	Sept 1-

County Fairs in Maryland

Frederick	Frederick	Oct 14-17
Cecil	Elkton	Oct 7-10
Harford	Belt Air	Oct 14-17
Montgomery	Rockville	Sept 3-5
Washington	Hagerstown	Oct 21-24

DRAINING is one of the most important matters on the farm. On a piece of Michigan land containing twenty-five acres, which produced bog grass, rushes, and other valueless growth, an expense of nearly \$500 was incurred in order to drain it. The first year after the drainage \$1570 was realized from grass alone. A New York farmer reports that he has land that produces forty bushels of wheat per acre which formerly produced nothing, the large crops being due to good drainage.

Superphosphates for Wheat.

One of the most remarkable changes which has taken place in our agriculture during the past eight years is the general use of superphosphate for winter wheat. That it pays the farmers to use it, there can be no doubt, Farmers are not inclined to make accurate experiments; but they do not continue to pay out money year after year for an article the use of which is unprofitable. How long the use of phosphates will continue profitable, will depend on the amount of organic matter existing in the soil, and upon the use which is made of the increased crops obtained from the use of the phosphates. If all the crops are sold off the farm, we should soon, except in rare cases, so far impoverish the soil that profitable crops could not be grown. On the other hand if we use the money obtained from the increased crops of wheat, barley, potatoes, vegetables, etc., to buy a small amount of bran, cotton-seed cake, malt-sprouts, etc., to feed out in connection with our straw, corn-fodder, clover hay, etc., the use of phosphates will enrich rather than impoverish the land.

Year before last the wheat crop in this section was the best I have known for thirty two years. The Deacon has lived here much longer than this, and he says he has never before known so good a crop. And farmers who cleared up the land from the original forest say the same thing. One of them told me (and he is a reliable man) that he got fifteen hundred bushels of wheat from thirty acres. It was not phosphates in this case; he drilled in ashes and plaster; but it was not ashes and plaster that produced the crop. Whatever the cause, it is evident that our soils are still capable of producing good crops of wheat.

One thing is certain, our farmers as a rule are working their lands better than formerly. We have better plows, better cultivators, better harrows, better rollers, and better horse-hoes, though the latter are not half as good as they ought to be. We do more fall plowing. Even the Deacon harrowed his corn-stubble last fall, and got it ready to drill in oats this spring. We are getting more and more in the habit of preparing our land in the autumn. The Deacon is not here today, or perhaps he might dispute some of these statements.—JOSEPH HARRIS in *American Agriculturist* for July.

Substitutes for Rain.

Hoeing, and the frequent stirring of the surface of the soil, are good substitutes for rain. Those parts of the garden that are most frequently cultivated show the best results. It is probable that corn, watermelons, tomatoes, Lima beans, and cabbage, and possibly other plants, if well started, in good, deep soil, may go through a two-months' drouth without very serious damage. A deep, well-manured soil suffers much less than a shallow soil. Sub-soiling and manure are to a certain extent substitutes for rain. Moisture comes from below. Underdraining is also a safeguard against drouth. The course of the drains in the garden can easily be marked in a dry season, by the ranker growth of vegetation above them. Irrigation, in many parts of the North, will pay. The soil, if well prepared, could use, to great advantage, twice the quantity of water it receives from rains during the dry months of summer.

Pull up the Weeds.

Just now the weeds are growing with startling rapidity, and just now the farmer and the gardener may very profitably devote some attention to these ubiquitous nuisances. The milkweed, the burdock, the daisies, the nettles, the plantains, the thistles and scores of the composite plants are running to blossom at this season of the year, and now is the time to destroy them, before their countless seeds are matured and ready to float away upon the breezes to scatter desolation upon the land. In one or two days the hands on almost any farm could rid it of nine-tenths of its weeds, and the labor, would be well spent, indeed.

Farmer, did you ever stop to think how many plants you destroy whenever you pull a milkweed, a burdock or a thistle! Count the seeds in a single head of these plants, and you will be surprised to discover what power for mischief lies in the few weeds of this class that may be allowed to mature in a single field. One acre of land abandoned to sorrels, daisies, mulleins, milkweeds, thistles, wild sunflowers, cat-tails, sedges, rushes and other many-seeded plants is sufficient to furnish seeds for a whole county. You can well afford to sweep around your fields once a year, uprooting these hardy and omnipresent plants before they come to seed. Pull them up,

root and branch, and throw them upon your tilled land, where they may restore some of the plant food they have taken from your crops. A farm that grows two hundred tons of noxious weeds, along its fences and in its neglected fields, is robbed of just that amount of soil fertility, and it could just as well grow the same number of tons of valuable hay or other crops. Cut, burn, plough under, uproot your lines of stalwart ragweed, elecampane, Johnswort, Jimson weeds, bouncing Bet, live-forever, wild buck wheat and wild carrots. They are a disgrace, a curse, a nuisance and an expense.—*Orange County Farmer.*

Farm Law.—Rights in the Road.

If a farm deed is bounded by, on, or upon a road, it usually extends to the middle of the roadway. There are a few exceptional cases; but ordinarily the farmer owns the soil of half the road, and may use the grass, trees, stones, gravel, sand, or anything of value to him, either on the land, or beneath the surface, subject only to the superior rights of the public to travel over the road, and that of the highway surveyor, or other similar officer, to use such materials for the repair of the road; and these materials he may cart away, and use elsewhere on the road, but he has no right to use them for his own private purposes. No other man has a right to feed his cattle there, or cut the grass or trees; much less deposit his wood, old carts, wagons, or other things thereon; and after notice to the owner, the farmer may remove them to some suitable place, and if they are lost or injured it is not his fault. The owner of a drove of cattle which stops to feed in front of your land, or of a drove of pigs which root up the soil, is responsible to you at law as much as if they did the same things inside the fence. No person's children have a legal right to pick up the apples under your trees, although the same stand wholly outside of the fence. No private person has a right to cut or lop off the limbs of your trees in order to move his old barn or other buildings along the highway; and even if the owner of the building has a license from the proper authorities to move the same through the streets, this does not exempt him from liability to private sufferers. And no traveller can hitch his horse to your trees in

the sidewalk without being liable if he gnaws the bark or otherwise injures them; and you may untie the horse and remove him to some safe place. If your well stands partly on your land, and partly outside the fence, no neighbor can use it, except by your permission. Nay, more: no man has a right to stand in front of your land, and whittle or deface your fence, throw stones at your dog, or insult you with abusive language, without being liable to you for trespassing on your land; he has a right to pass and repass in an orderly and becoming manner—a right to use the road, but not to abuse it.—*Judge Bennett.*

OUR LETTER BOX.

Bone for Turnips.

Editors Maryland Farmer:—If our agricultural readers desire to make a big crop of big turnips on a little bit of ground, let them use bone fertilizer. Pure ground bone is best, but bone-phosphate is excellent. Bone is THE fertilizer for turnips. Try it once, if you have not already, and be convinced.

First, plow the land and harrow it nicely; the site of a cow pen or a potato-patch is an excellent foundation to start on, as it takes a rich soil to make big turnips, unless you fertilize lavishly. But poorer land with plenty of bone will do, and it has the advantage of not producing so much grass.

After the soil is prepared, lay off the rows two feet or two-and-a-half feet apart, put the fertilizer in the drill, and then make a small ridge over it by lapping two furrows with the small turn plow. Now flatten the rows by running a peanut scraper over them, and with a peanut dotter make holes for planting the seed. Most dotters are made to mark fourteen or fifteen inches apart, and this is not too far for big turnips, and to give plenty of room to hoe them. Drop about six seed in each hole, and cover. This is our plan, and it works nicely. Of course others may pursue any method that is most convenient to them. The distances named are great enough, as all the plowing required may be done with a cultivator.

The crop should be plowed and hoed twice, by which time the season will be so far spent that what weeds and grass will then come will do no harm. If you have used at the rate of three to four hundred pounds of bone to the acre, you will have turnips to sell and to keep, and some to show at the fairs.

As to the varieties to be planted, that will depend mainly upon the use they are to be put, whether fed to stock or sold in market. For stock, the varieties of ruta бага are best, the yellow Swede perhaps the best of all, large nutritious and prolific. For table use and market, the Flat Dutch and purple top are highly esteemed; firm and large. The white Globe is also superior. The long Cow's Horn, fit only for stock, yields more pounds per acre than any other. For salad in late winter and spring, the so-called Seven-top is best. The root does not attain much size, and hence it should be sowed all the way along the drills, and not in hills. This kind stands any amount of frost, and little or no winter protection is required. It need not be fertilized so heavily as the other sorts. To keep the flea-bug from injuring the young plants before they attain size and strength, apply plaster along the rows. It serves the double purpose of a fertilizer and as partial insecticide. Surry county, Va. B. W. J.

A Great Family of Milk Producers.

SYRACUSE, N. Y. July 28, 1884.

E. WHITMAN ESQ., Prop. Maryland Farmer,

Dear Sir:—We take pleasure in announcing that another member of the already famous Aaggie family has stepped to the front, with a record for one day, as a *two-year-old*, of 67 lbs. 6 ozs. which, we believe, surpasses any two-year-old records, for one day ever published.

This remarkable heifer is Aaggie Constance, (H. H. B. No. 2629) imported by us when a calf, in sept., 1882.

Her sire was De Ruiter, (N. H. B. 89) a half-brother to Neptune (711) and Aaggie 2nd, (1360) which has a two-year-old record of 61 lbs. 5 ozs. in a day and 17746 lbs. 2 ozs. in a year.

De Ruiter is also, the sire of Aaggie Clara, (H. H. B. 2626) with a two-year-old record of 65 lbs. 12 ozs. in a day, and of Aaggie Jennie, (2625) with a two-year-old record of 50 lbs. 15 ozs. in a day.

These and many other records of the same family demonstrate, beyond question, that this is the greatest family of milkers known.

Resp. Yours, SMITHS & POWELL.

[We learn from the same firm, July 12th, 1884 they had made a complete yearly record of five mature cows, three of them were imported only the autumn before and of course not fully acclimated.

Notwithstanding this draw-back, the entire lot averaged 15, 621 lbs. 1 ½ oz. per cow.

This result must be very gratifying to these enterprising gentlemen, and will interest all our readers concerned in the production of milk.—
EDS. MD. FAR.]

A Trip to Canada.

Messrs. Editors:—Agreeable to my promise, I propose to give you a short description of my trip to Canada. In company with our old friend Capt. J. P. L. Hopkins, of Onancock, Va., I left Baltimore Sunday night, July 6th, via the Northern Central Railroad. We left Union depot at 11:15 and having secured a section in a Pullman Sleeper, were not long in "turning in" as we were both pretty tired before starting, and made up our minds in advance to loose as little rest as possible, and in fact to take things easy as we went along. We were both soon in the land of "nod," and had a good night's sleep, arising in the morning, only in time to arrange our toilets and make ourselves presentable for breakfast, which we got at Williamsport, Pa., at the hotel, formerly the Herdic House, so-called after its owner and proprietor, whose history of "ups and downs" you probably know better than I can tell you. Mr. Herdic, by the way, is now in Boston, where he is making quite a success of his Coaches, which proved such a miserable failure in Baltimore.

I am sorry to say that contrary to our determination, our breakfast was a hurried one, made so by the large number of ladies present, who, of course, commanded first attention, and the Captain and I had to eat and run, but were happy in the fact that they could not hurry us over our cigars, which we smoked leisurely as we watched the ever-changing panorama as we thundered along; at Elmira we only stopped long enough to see that it was a "live place," and then passed on to our first stopping place—WATKINS GLEN.

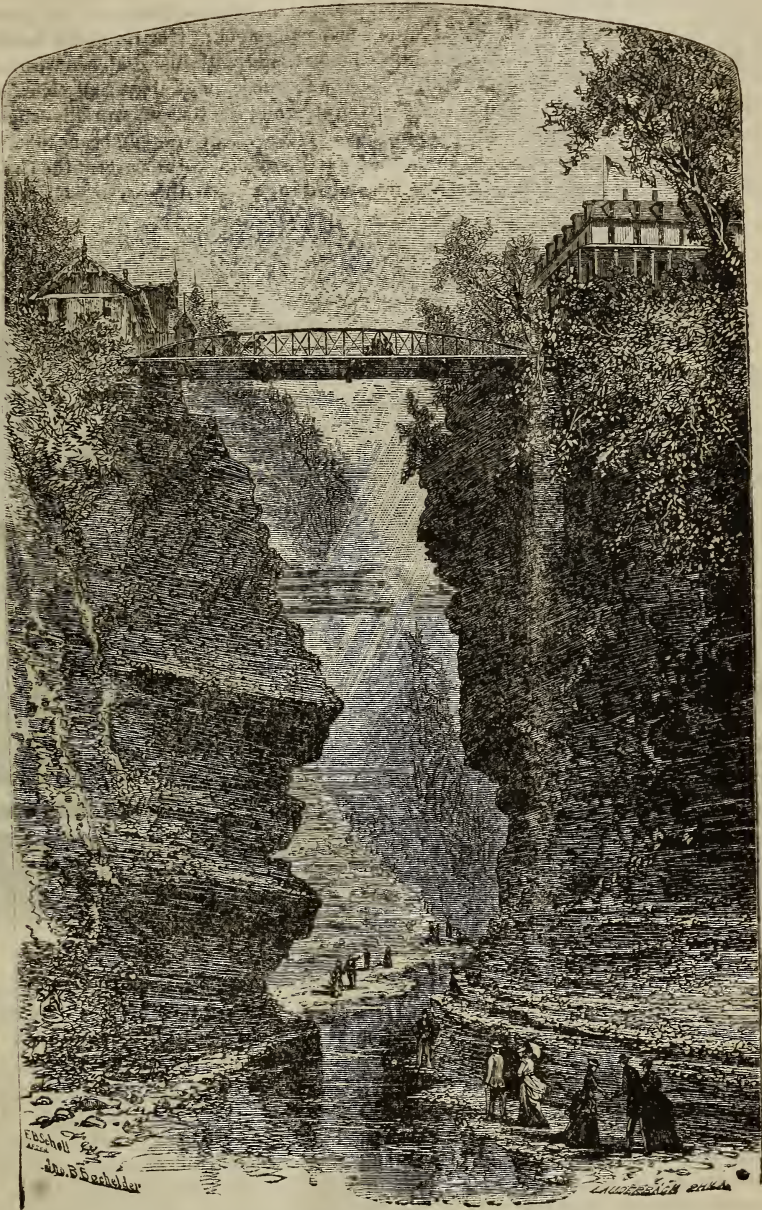
This is truly a wonderful place and I hardly dare attempt a description. We found the Glen Mountain House to be kept by a Marylander, Mr. A. J. Michener, of Cecil county, (who, by the way, owns the Glen, having paid, we were told, \$65,000 for it,) to this house we repaired for dinner, which we got in good shape and then felt better fortified for our tramp through the GLEN.

Watkins Glen is a deep and rugged ravine, ascending between two long ranges of low hills, on the west side of Seneca Lake valley. The remarkable forms assumed by the riven rocks, the rich foliage of the encircling forest, and the cascades on the falling stream, unite to make this the most charming of American glens. The Glen is several miles in length, but consists properly of a number of Glens or sections which have been given distinctive names, and which

form a series of rocky arcades, galleries, and grottoes. A limped stream of mountain water flows through the Glen, having a fall from first to last of eight hundred feet, and presenting a constant succession of beautiful cascades and rapids. Of these, Rainbow Falls is perhaps the most interesting. "With the bright sheen of a summer day playing in the rising mists, the scene is frequently clothed in rainbow tints, but nowhere with such brilliant hues or perfect arch as at Rainbow Falls; and the hour of four on every afternoon finds a crowd of guests worshipping at its shrine far in the depths of Watkins Glen." Of the many chambers, the Cathedral is perhaps the most imposing. This is an immense amphitheatre, with walls of solid rock rising to the perpendicular height of three hundred feet, while the forest trees with which the top is fringed stretch their arms far over the yawning gulf. Into this mighty chasm the waters spring with a frightful leap, bathing its sides with feathery spray, then quietly spreading over the rocky floor. The atmosphere, even on the hottest day, is cool and moist. Trees of primeval growth, hardy shrubs, and luxuriant vines cling in wild forms of beauty to the interstices of the rock, reflecting their rich foliage in the emerald pools beneath, while far above is seen the bright blue sky. At times the rich sunlight, reflected from cliff to cliff, clothes all with a soft, mellow glow. It was the remark of Bayard Taylor, that he had never met with scenery more beautiful and romantic than that to be found in this wonderful Glen, and we left it well satisfied that we could but reiterate his opinion.

At half past five Monday afternoon, we found ourselves on a "bob-tailed" train, (consisting of engine, tender and one car,) bound for Geneva, on the upper end of Lake Seneca; we made no stop here but went through to Syracuse, where we rested over night. Tuesday morning at 6 o'clock we took the train for Pulaski on the R. W. & O. R. R., about 3 miles from Lake Ontario. We spent a most delightful day here as the guest of Mr. Louis Clarke, cashier of the Pulaski National Bank, and owe our thanks to him for his kindness. The Pulaski Bank is quite an institution, and ought to be called the The "Clarke" National Bank, as president, cashier, directors, and all the clerks are CLARKES.

We took quite an interest in the cheese factory here, and saw how a model factory can turn out cheese and make money at it. We left Pulaski in the afternoon for Cape Vincent, and after a delay of an hour, caused by a breakage in the engine, sped along, reaching the Cape about 7



WATKINS GLEN, N. Y.

o'clock. Here we were met by our host, Mr. Cleveland and our old friend Geo. Vanderbuilt of New York, and behind a pair of Mr. C's trotters were driven to his residence.

As implied by its name, Cape Vincent is situated on a point of land—extending far out into the water—at the junction of the River St. Lawrence with Lake Ontario, and thus offers on its banks many an acre of fertile fields, sloping gently to the water's edge. Many a summer idler sojourning here in early June, drinking in

the growing stock of seed peas, you will not be surprised when I tell you that Cape Vincent was to me the most interesting place on our trip.

Mr. C. is fitted out and out for growing and curing the stock. His warehouse facilities are of the best, and with his residence within 50 feet of his warehouse, he is able at all times to be on the spot and see that no work is slighted. He has 5,200 acres in peas and beans this season, and his trade extends to all parts of the United States and Europe. Our time was well occupied be-



A. B. CLEVELAND'S WAREHOUSE.

the ozone laden air, occasionally stiffened by a judicious draught of "Canada Proof," returning from drives along the shore, or from a row upon the river, has exclaimed on the beauty of the scene, affirming that the commingling of the luxuriant green of the pea fields which stretch along the shore as far as the eye can reach, like a carpet more beautiful than e'er fashioned by the hand of man, and of a tint surpassing arts imitations, with the dark, changeful hue of the water, forms a picture of which the eye never wearies, and no other spot on earth offers the like.

Mr. Cleveland is probable the largest pea grower on the lake border, and as you are aware that my trip was for the purpose of looking over

tween examining pea fields and sight seeing in this most beautiful of countries. Owing to the severe droughts, the early peas were looking badly, and the prospect is that the crop will be very short, probably not over a half crop. The late peas were looking much better. Amongst Mr. Cleveland's customers, (who are at all times his guests when at the Cape,) we met Mr. Vanderbuilt and Mr. Bruggerhof, of New York; Jno. T. Burnell, of England; Z. De F. Ely, of Phila; C. S. Smith, A. F. Wilson and J. S. Roeckels, of Long Island.

I could write for a week on the pleasures enjoyed during our stop here, but for fear of boring you and occupying too much of your valuable space, I will curtail, not however, till I have

mentioned our trip on the lake on board the steam yacht *Lancet*, kindly placed at our disposal by Col. Hance, and which was immensely enjoyed by all. Thursday night we were right royally entertained by the "Cape Vincent Club." Friday a trip down the St. Lawrence amongst the "Thousand Islands" was planned for us through the kindness of Mr. Northrop, Mr. Cleveland's most courteous and successful travelling man. This is probably the most beautiful river scenery in the world, surpassing by far, the Hudson, which is so universally admired. Before leaving Cape Vincent I must say one word, without which I should consider my letter incomplete. Our hostess, we must not forget, enervating from one to a dozen of her husband's customers for days at a time, having them come and go at such times as suited them best, presided with an apparent pleasure and dignity that called forth the admiration of all, and to her we all felt that our thanks were due for the additional pleasure she added to our trip.

We regretfully left the Cape Friday afternoon for Albany, and Saturday morning took the magnificent steamer "*Chauncey Vibbard*" for a trip down the Hudson by daylight.

Capt. Hopkins enjoyed this trip very much, but as it was old to me I took my book and spent my time reading. We reached New York about 5:30 P. M. Spent a few hours looking around the city, and amongst other places made a trip to the famous Brooklyn bridge, which is immense and beyond our greatest anticipation; at 12 o'clock midnight we started for Baltimore, and arrived Sunday morning, for my part, glad indeed to get home, but well satisfied with one of the most delightful trips I ever made. THROP.

What our Maryland Fish Commission is Doing.

Dr. Eugene W. Humphreys, Fish Commissioner of the Eastern Shore, reports that during the past season the spring work from all hatching stations in the Eastern Shore districts reached the handsome aggregate of 37,233,000 fry in all of the four kinds hatched, viz: shad, herring, perch and rock. At the Wicomico station (Salisbury) there were hatched and distributed 2,885,500 shad, 2,032,000 herring, 129,000 white perch and 72,000 rock perch. At Nanticoke Station (Vienna) 540,000 shad, 1,265,000 herring, 4,425,000 white perch and 4,000,000 rock. At Choptank station (Coward's Point) 6,564,000 shad and 650,000 white perch. At Chester

station (Millington) 3,030,000 white perch and 1,740,000 yellow perch. The aggregate is in excess of that of any previous year nearly 7,000,000.

This is only what the Eastern Shore has done the past season, and when we have a report of what the work has been on the Western Shore, the people of the State will be gratified to know that our waters will again swarm with the finny tribe as in days of yore when our streams and rivers gave abundance of healthy food at all times for the taking of them, so that our people had at little or no cost the means of support of life beyond what the land offered. It is a great work founded on a grand idea.

WASHINGTON COUNTY FAIR.—Mr. Geo. Colton has given notice to the managers of the Washington County Agricultural Society of his intention to exhibit at the coming exhibition his fine collection of poultry and pigeons. The poultry department is to be the leading feature of the exhibition, and the managers have ordered the erection of additional buildings for the accommodation of the poultry exhibition. This exhibit of superb fowls and pigeons is alone worth a visit to Hagerstown to see and admire.

KENT County, Md., Agricultural Fair will be held at their fair grounds, near Chestertown, on the 23, 24 and 25th of September, 1884, and it is fully expected from present indications that it will be the most successful meeting the society has ever held.

Consumption Cured.

An old physician retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma, and all Throat and Lung affections, also a positive and radical cure for nervous debility and all nervous complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send free of charge to all who desire it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper. W. A. NOYES, 149 *Power's Block, Rochester, Y.*—*

CLUBBING.—For the purpose of aiding our subscribers to an economical benefit of other Journals in our line, we have consented to club with the following for 1884:

The Breeders Weekly Gazette, Chicago, Ill., price \$3.00; with Maryland Farmer, \$3.25.

American Angler, price \$3.00; with Maryland Farmer, \$3.25.

Live Stock Monthly, Portland, Me., price \$1.00; with Maryland Farmer, \$1.50.

Poultry Yard, Hartford, Conn., price \$1.50; with Maryland Farmer, \$2.00.

☛ All payable in advance.

SPECIAL NOTICE.

New subscribers who pay one year *strictly in advance*, will also receive free, in connection with the MARYLAND FARMER, twelve consecutive monthly numbers of the *Poultry Post*, an illustrated and thoroughly practical paper, devoted entirely to the poultry interest. The *Poultry Post* is not an advertising sheet, but a legitimate publication, containing in each issue twelve or more columns of just such practical information upon the breeding, rearing, feeding, housing and marketing of poultry, as is needed by, and useful to every farmer, and it will be furnished to new subscribers on the above terms.

The Receipts of Wheat.

The receipts of wheat in Baltimore for the month of July were 3,251,437 bushels, an increase of 1,519,122 bushels over the corresponding month in 1883; corn 86,604 bushels, a decrease of 374,211 bushels; oats 92,148 bushels, an increase of 10,662 bushels; rye 45,060 bushels, an increase of 36,602. The receipts of flour were: From city millers, 29,695 barrels; per rail, 42,814; per steamboat, 2,597.

This statement is given to show the immensely increasing grain trade of Baltimore, and also to show that the State

wisely has determined to use more corn at home, to be sent to market on hoofs of cattle, hogs and sheep. Thus eating the cake and retaining it too. Improving the land, at same time getting full price for the corn that formerly was sent off to market at low price and leaving no good effects at home. Such is stock-raising.

Our farmers will see it is to their present and future interest to grow more and better stock and consume all their surplus corn at home, except so much as may be sold to buy cotton seed-cake, or linseed oil-cake, to increase the fattening properties of corn meal, corn and cob ground, etc.

Immense Yields of Wheat this Year in Maryland.

Mr. Peter Cover, near New Windsor, Carroll Co., on a field of 12 acres raised an average of 46½ bushels per acre of No. 1 Maryland red wheat, and sold for 96 cents per bushel in Baltimore city. But Frederick county seems to be the banner wheat county this year, as the crop is estimated to be not less than 2,000,000 bushels. In Woodville district, where the soil is not considered the best in the county, Mr. Weldon Clary raised 510 bushels on a 10 acre field, or an average of fifty-one bushels per acre. The crop over the whole State on being threshed turns out better than hoped for, and its condition is generally the best for years past. Late returns show that Washington county has equalled Frederick, in her yields of wheat; several farmers report 45, 50 and 52 bushels per acre of fine, sound grain, as the average on fields of 12 to 20 acres, and some report over 25 bushels per acre after corn on fields of 100 acres. Yet we regret that the yield in the lower counties of the State has not been hardly an old time average.

PAINTING FARM WAGONS.—Anybody can learn from "Everybody's Paint Book," a new work just published, how to paint farm wagons, buggies, etc. Full directions given for mixing and applying paint and varnish. See description in our advertising columns.

Landreth Wheat.

We are in receipt of a sample bunch of heads of the "Landreth Wheat," forwarded by D. Landreth & Sons, Philadelphia, who developed and have given their name to the variety. Its long, heavy heads, filled to the very top with heavy golden kernels, and its bright, stiff straw give evidence that it is a valuable variety of winter wheat. The sample was accompanied by a large number of printed testimonials from farmers who had grown it, all speaking strongly in its favor. The heads in the sample sent average five inches in length.

This old firm is so well known and has so long been relied on by the public as a pains taking, honest and energetic seed establishment, it will avail but little for us to bear testimony to its high integrity, yet we cannot withhold our commendation of this sample of their new seed wheat.

THE FALL RACE MEETING AT PIMLICO.—Let it not be forgotten by all who love splendid racing upon a well conducted course, that the coming fall meeting of the Maryland Jockey Club at its beautiful Pimlico track, is confidently expected to be one of the most brilliant of all its heretofore successful assemblages. It is the last of the racing campaign East, and promises to be memorable for the first meeting of all the great cracks in the country. The purses are large, the course famous, and the club under the management of reliable gentlemen, must attract always large numbers of visitors of the best people, and the bringing together all the great racers that compete for fortune and fame. Under such circumstances, never before more propitious, a grand and brilliant meeting is looked for this autumn.

PRETTY AS A PICTURE.—Twenty-four beautiful colors of the Diamond Dyes, for Silk, Wool, Cotton, &c., 10c. each. A child can use with perfect success. Get at once at your druggists. Wells, Richardson & Co., Burlington, Vt.

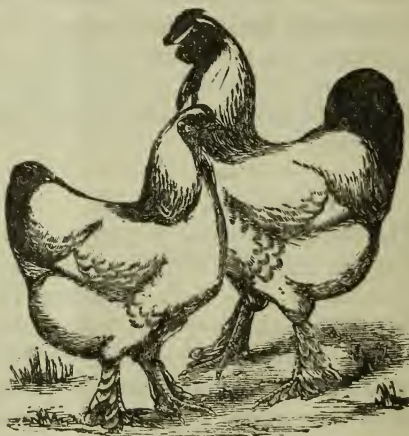
BALTIMORE COUNTY FAIR, at Timonium, will hold its next fair September 30th and October 1, 2 and 3, and promises to even excell all previous five years.

PIEDMONT AGRICULTURAL SOCIETY.—Will hold its 12th annual fair at Culpeper, Va., on Sept. 9, 10 and 11. If this old society does not afford pleasure and profit to all who patronize its meetings it will be its first failure to do so.

BURK'S COUNTY SOCIETY will hold their 30th annual fair at its old place, Reading, Pa., on September 23, 24, 25 and 26, 1884. As usual their premium list is very extensive and embraces all departments of machinery, stock, poultry, horticultural productions and household articles.

THE POULTRY-HOUSE.

We are enabled to give a few more life-like pictures of choice fowls and information concerning them, through the politeness of the *Old Dominion Poultry Company*, Cuckoo, Va.

**Light Brahmas.**

"Light Brahmas are the largest breed at present among our improved fowls, and have held that distinguished merit from the dawn of their popularity. The chicks grow to broilers in eight weeks, and should be killed as such from eight to twelve weeks

old. They yield the largest amount of poultry for food consumed at seven to eight months of age. A good hen will lay one hundred and fifty eggs, hatch and rear a brood of chickens each year, laying one hundred of that number of eggs between December 1 and June 1, thus producing them when they demand the highest prices. Cocks weigh from twelve to thirteen pounds when fully grown. They are good winter layers of large rich flavored eggs, and are a fine market fowl, dressing from five to six pounds at six months old. They are well content in a small yard, and can be kept in by a fence three or four feet high, which makes them well suited for town or country. We confidently recommend them to all those wishing to raise poultry for market."



White Leghorns.

"Of all the improved domestic fowls cultivated in this country, the Leghorn stands pre eminently in the front rank as egg producers, being of the non-sitting class, though if not discouraged, enough of a flock will be disposed to assume maternal duties as will be desired, and make the best of mothers. Being wonderfully precocious they are ready for the table long before most birds have a pin feather; the flesh is exceedingly sweet and tender. The pullets commence laying at from four to five months old, and the cockerels—*young smashers*—are crowing and making love at six or eight weeks from the shell. They are the real blue-blood in the feathered world, and make a splendid cross on commoner stock. They are emphatically the chicken for the times."

Caponizing Fowls.

In response to several inquiries, we give the following from a late number of the *Poultry world*:

DIRECTIONS FOR CAPONIZING.

The object of caponizing is to improve the quality and increase the quantity of the flesh of fowls. A capon will outgrow a cock of the same age just as an ox will exceed a bull in weight, and for the same reasons, which are, that castration makes an animal less restless and quarrelsome, and less of the nutriment it digests is diverted from flesh-forming. The operation is not very difficult, and is quicker performed after a little practice.

The instruments consist of a pair of crooked concave forceps, pointed hook, a pair of tweezers, and a steel splint with a broad flat hook at each end. Remove the feathers upon a spot a little larger than a watch, at a point upon a line between the thigh and shoulder. Next, pull the skin backward, so that it may slip forward again after the operation is completed, and with a keen knife make an incision an inch and a half long parallel with the last two ribs, and between them, untill the intestines are visible, taking care not to injure the latter. Now separate the ribs by attaching one of the hooks to each, and allowing the ends of the splint to spread, as they will do when let go. The intestines may be pushed away with a teaspoon handle, or other flat, smooth instrument, and when the testicles are found (attached to the back) the tissue which covers them must be held by the tweezers, and torn open with the pointed hook. Next grab one of the testicles with the crooked concave forceps, and with the tweezers lay hold of the spermatic cord, to which the testicle is attached. Now twist the testicle off with the crooked concave forceps, after which the operation is repeated on the other testicle, the incision is closed (no sewing being necessary,) the skin allowed to resume its place, and then the feathers which were removed are stuck on the outside and left to adhere by means of the blood, forming the only bandage necessary. Take pains not to disturb the parts to which the testicles are attached. The pressure of the tweezers tends to prevent pain and loss of blood. Wrenching off the testicles is more humane than the old mode of cutting them with the horse-

hair, and is more expeditious, and torsion produces less bleeding than cutting does.

There need be no more than 6 or 8 per cent. of the birds killed, even by an indifferent operator; and as those die by bleeding to death, they may be eaten as if they had been butchered in the regular way. To avoid bleeding, take care not to rupture the large blood vessels attached to the organs removed. The best age for cockerels to be operated upon is three or four months. In order that the intestines may not be distended, prepare the bird by shutting it up without food or drink for thirty-six hours previous to the operation. Capons continue to grow fat for a long time, and they should be kept until twenty months old, in order to gain the full advantage of the operation.

The feathers of each side of the incision can be twisted together with the bloody fingers, to help hold the wound together. After the operation, give the birds plenty of water, but feed very sparingly with soft cooked food until they move around with ease and begin to scratch. If fed on the full with hard grain at first, some will die.

Caponizing may be defended against objections on the score of cruelty just as well as castrating colts, calves, pigs and lambs. The rearing of capons will certainly be followed to a great extent in this country as soon as the people learn the excellent quality of the flesh, which is not only extremely delicate and juicy, but the birds grow to nearly the size of turkeys, and are so quiet that their growth is produced with less feed than in the case with fowls. Already there are many going into the business. Capons command prices from 30 to 50 per cent. higher than the common fowl."

A Sheet Iron Hen.

The *Inter-Ocean* describes a novel invention as follows: "An ingenious fellow in Ohio has constructed a sheet iron hen that promises to lay a golden egg. It is finished up to life, full size, cackles, clucks, and looks with one eye at a time so naturally that it will deceive the oldest hen-hawk in the country. It is so arranged that when a hawk, mink, or polecat pounces on to it, the back springs open and the wings fly up and force the assailant on to a ravenous buzz saw that makes 1,700 revolutions per minute. After moving half a minute the saw stops, then hen closes up,

folds its wings, and begins to cackle as though it had just laid an egg. One winding up will answer for three massacres, provided the rather delicate machinery does not get clogged up too much with the blood, bones, and feathers. He set a freshly painted one out in the sun to dry the other day, which attracted the attention of a fine old cat belonging to a doctor who had been poking a great deal of fun at the fool thing. The hen is there, but the cat is hence.

INCUBATORS.—Considerable interest has been excited in the last two or three years on the subject of incubators, and those interested have been feeling around in the dark, as it were, in trying to strike some method by which chickens could be hatched sure and without trouble. This is somewhat like the "royal road to wealth." The royal road to wealth has not been as yet found without encountering some trouble on the road. The same is true in regard to hatching chickens. Even if the most perfect incubator was procured, it will be found necessary to attend to it every day, and what with turning of eggs and renewing of oil and keeping an even temperature, the incubators have not made so many friends as was at first thought they would.

The best incubator we ever found was the hen herself. She has been bred to the business, and after she once makes up her mind to go at it she has no other business on hand.—*Breeders' Journal*.

RELATIVE NUMBER OF EGGS.—The relative number of eggs yearly laid by the different breeds are found to be: Light Brahmas 150, weighing seven to the pound; Dark Brahmas 100, weighing eight to the pound. These are the best winter layers. Black Cochins 150, weighing eight to the pound; Buff, White and Partridge Cochins 120, eight to the pound, Plymouth Rocks and Wyandottes 132, weighing 9 to the pound; Houdans 240, La Fleches 155, both produce eggs 7 to the pound; Black Spanish 132, 8 to the pound, but the old Minova Spanish will produce them 7 to the pound; Leghorns 160, Hamburgs 150, Dominique 130, Games 130, the Leghorns weighing 8½ to the pound, and the balance 9 to 9½ to the pound. Bantams 130 eggs, at sixteen to the pound. The above table is a very good guide in the selecting of breeds where egg production is the result desired.

MILLIONS IN POULTRY.—During the two weeks of April, 1884, or the two before Easter Sunday, there were 78,667 barrels of Eggs received in the markets of New York City. Think of one city alone taking 5,506,690 dozens, or 66,080,280 eggs in two weeks! This enormous demand cannot be supplied, it would seem, by our home producers, for we not only import from Canada, but France and Germany send to us \$6,000,000 to \$7,000,000 worth annually of poultry products. The imports received in New York markets from January 1 to April 15, 1884, were alone over 14,000 cases of eggs. Again the value of poultry produced in the United States, according to statistics of 1882, exceeds the value of either hay, wheat, cotton or dairy products, as the following figures will show:

Wheat.....	\$488,000,000
Hay.....	436,000,000
Cotton.....	410,000,000
Dairy product.....	243,000,000
Poultry product.....	560,000,000

The city of New York consumes over 100,000,000 tons of dressed poultry annually, which at the low estimate of ten cents per pound amounts to \$20,000,000.

THE laying hens should have plenty of fresh water at this season, as eggs contain more water than anything else in their composition.

THE *Poultry World* says that the difference between an egg laid by a plump, healthy hen, fed with good, fresh food daily, and an egg laid by a thin, poorly fed hen is as great as the difference between good beef and poor. A fowl fed on garbage and weak slops with very little grain of any kind, may lay eggs, to be sure, but when these eggs are broken to be used for cake, pies, etc., they will spread in a weak, watery way over your dish or look a milky white; instead of having a rich, slightly yellow tinge. A "rich egg" retains its shape as far as possible, and yields to the beating of a knife or spoon with more resistance, and gives you the conviction that you are really beating something thicker than water or diluted milk.

PAINTING FLOORS.—Full directions for painting kitchen and other floors are given in "Everybody's Paint Book," a new work just issued, and fully described in our advertising columns.

THE DAIRY.

How Many Acres Support A Cow?

In reply to a query how much land is required for the support of a cow? The Farmers' Union says? This question depends for an answer so much on the circumstances of the soil as not to admit of a very definite answer. Mr. Schell, of Little Falls, N. Y., estimates that the land in pasturage and requisites for the support of a cow is three acres; and this is the estimate of Mr. Carrington for modern good dairy farms in England. In Belgium 10 acres of land supports two cows, one heifer and one yearling calf; but when the calves are sold off young and cows in full milk only are kept, the proportion is two cows to seven and one-half acres. Colman estimates three acres of pasturage as requisite for a cow in Berkshire county, Mass., while in some towns two acres are sufficient. Mr. Farrington, in the report of the American Dairyman's Association, thinks on an average four acres are required per cow for summer and winter keep; while the late Prof. X. A. Willard thought that in Herkimer county, N. Y., one and one-half or two acres of pasture per cow would answer, and in some exceptional cases one acre. Dr. Tefft, President of the Illinois Dairyman's Association, recently informed the writer that in Illinois he considered from two and one-half to three acres about what would be required. The doctor is a practical farmer and is the owner of a very fine dairy, but his statement seems a little wild when we refer to the fact that Mr. Lord, an Elgin dairyman, keeps 100 cows on 300 acres, besides the horses necessary for farm work, while the Ottoman Bros., near Elgin, keep 84 cows and the requisite number of horses to do the farm work on 200 acres. They use ensilage largely in the place of hay."

SKIMMING:—An Exchange says, "In skimming the cream off from milk, there should always be milk enough skimmed with the cream to give the butter, when churned, a bright clean look. Butter churned from clear cream, with little or no milk in it, will usually have an oily or shiney look. This shows that the grain of the butter is injured, which affects the keeping qualities of the butter."

THE Wisconsin Dairymen's Association offered prizes last year for essays on butter making, not to exceed 250 words in length. The following by D. M. Curtis, of Fort Atkinson, took the prize:

COWS.—Select cows rich in butter-making qualities.

FEED.—Pastures should be dry, free from slough-holes, well seeded with different kinds of tame grasses, so that good seed is assured. If timothy or clover, cut early and cure properly. Feed corn, stalks, pumpkins, ensilage, and plenty of vegetable in winter.

GRAIN.—Corn and oats, corn and bran, oil meal in small quantities.

WATER.—Let your cows drink only such water as you would yourself.

CARE OF COWS.—Gentleness and cleanliness.

MILKING.—Brush the udder to free it from impurities. Milk in a clean barn, well ventilated; quickly, cheerfully, with clean hands and pail. Seldom change milkers.

CARE OF MILK.—Strain while warm; submerge in water 48 degrees. Open setting, 60 degrees.

SKIMMING.—Skim at 12 hours; at 24 hours.

CARE OF CREAM.—Care must be exercised to ripen cream by frequent stirrings, keeping at 60 degrees until slightly sour.

UTENSILS.—Better have one cow less than be without a thermometer. Churns without inside fixtures. Lever butter worker. Keep sweet and clean.

CHURNING.—Stir the cream thoroughly; temper to 60 degrees; warm or cool with water. Churn immediately when properly soured, slowly at first, with regular motion, in 40 to 60 minutes. When butter is formed in granules the size of wheat kernels, draw off the butter milk; wash with cold water and brine until no trace of butter-milk is left.

WORKING AND SALTING.—Let the water drain out; weigh the butter; salt, one ounce to the pound; sift salt on the butter, and work with lever worker. Set away two to four hours; lightly re-work and pack.

Feeding Cows.

A cow ought to give six thousand pounds of milk per annum. Mr. Stewart says that if a cow weighs nine hundred pounds, that amount of milk would be nearly seven times more than her own weight, and the cow actually produces as food through her milk twice as much as the beef animal of the same weight gains in flesh during the same time. Now the composition of six thousand pounds of milk, according to a foreign authority, would be as follows, Casein and albumen, 243 pounds; fat or butter, 228 pounds; milk sugar, 278 pounds; salts or ash, thirty-nine pounds, or dry matter nearly equal in weight to that of the cow. The important point to be observed in this, is that such a large production necessitates a very large supply of food. We all know what a large consumer of food the cow is. But it would seem to be expected by some that she can live and produce on comparatively nothing. On the contrary she must first be supplied with nutriment. Her milk and its products are simply the conversion of the surplus food that she does not need to supply the waste of the system, into these products. We have often urged good care and kind treatment of the cow, because if she is not thus cared for and treated she must have additional food to repair the unnecessary waste. If she is exposed in winter it will take more food to keep up the warmth; if she is annoyed, her excited nervous system will cause additional wear, just as a rapidly running machine wears out faster than one that runs slow. Nervous excitement means that the animal system is on a strain—that it is wearing away more rapidly than it need to. Under such circumstances, therefore, food that might go to make milk, is utilized to repair this useless waste. It is a great deal of fun for a dog to worry a cow, and it is sometimes the case that her owner seems quite willing that the dog should enjoy himself in this way. But we do not propose to furnish such costly enjoyment to dogs. We should take a club, if the canine persisted in that sort of sport, and have a little fun at his expense. Every bark of a dog at the heels of a cow, means a handful of food wasted; and the economical, thoughtful farmer will conclude that he has no food to throw away for any such purpose.

TEACHERS WANTED—10 PRINCIPALS, 12 Assistants, and a number for Music, Art, and Specialties. Application-form mailed for postage. **SCHOOL SUPPLY BUREAU**, Chicago, Ill.

We must, therefore, take good, kind care of the cow and feed her well, and upon a variety of food. Milk, as we all know, is composed of all the elements that are found in the human body. The food, therefore, must contain all these elements. It is no doubt a familiar fact to the reader, that milk produced from several varieties of green fodder, will be better than if produced from one, because they differ in their composition. Green corn is an excellent fodder for dairy cattle, as far as it goes. But it is not fit for an exclusive ration. It has not a sufficient quantity of the albuminoids, a fact which we recommend for the consideration of those who are determined to believe that about all a cow needs in winter is ensilaged corn fodder. Feed with green corn, clover, oats, peas, millet, linseed meal, bran or middlings, and we shall get the results which we desire.—*Western Rural*.

DAIRYING in Pennsylvania is in a prosperous condition and does not seem to suffer from competition with "cheap" western products. The *Germantown Telegraph* says of Chester county: The dairies of this county are producing a large quantity of milk, and some of the creameries are receiving more than they can conveniently handle. The Oakland creamery, one of the largest, is receiving between 9,000 and 10,000 pounds of milk daily, out of which are made about 325 pounds of butter and seven-teen cheeses per day. The Fairmount creamery is receiving 16,000 pounds of milk daily, and last month paid 3 $\frac{3}{4}$ cents per quart. In consequence of the large quantity of butter made, the selling price has fallen considerably. Our farmers are retailing choice grass prints in the Philadelphia markets at 30 cents per pound." This shows the value of a good market as well as of fine goods. Elgin creamery of choice qualities has been selling at 20 to 21 cents.

MR. GRAY, of Howard county, left at our office a cluster of magnificent blackberries, and stated that he planted in the spring of last year 100 Gregg raspberry plants and 100 plants of Wilson strawberry and had gathered this season from the 200 plants fully 30 gallons of superior fruit. Does not fruit planting pay, we ask?

EVERY cow stable should have a board gutter sixteen inches wide to eight inches deep behind the cows to catch the droppings, says the *Rural New Yorker*, and this should be kept full of litter to keep the cows' tails out of the water. This will remove one frequent source of filth. The floor should slope two inches in the four and one-half or five feet of the standing floor to keep it dry. The stalls should be made with short partitions, so that the cows are obliged to stand straight and not mess up the other cows' floors. Then every cow must be thoroughly carded and brushed before it is milked every time, and made as clean as a carriage horse is. A man that will not keep his cows as clean as the horses he drives to church on sundays is not a clean dairyman. The cows should be kept well littered, and the gutter cleaned out every morning without fail, and littered freshly every night with leaves, straw or chaff. If this method is practiced there will be no dust, no loose hair, no filth; and if the milker will wash his hands before he milks, the milk will be clean enough to drink even without straining. The udder and teats should be wiped with a clean cloth the last thing before milking.

A writer in an exchange says that he was troubled with the smell of garlic, or wild onion, in his milk. To obviate this he put the cows in the stable about 3 o'clock each afternoon and fed them on hay and gave them their grain as usual. The result was all he anticipated. A rest of three hours allowed this scent to pass off in the other secretions. Though previously it very strongly flavored both milk and butter. The same course would probably be of advantage when the milk tastes of other foul weeds in the pasture.

FOURTH Annual Fair of the "Rocky Mount Society," to be held at Rocky Mount, N. C., on Sep. 30, Oct. 1, 2 and 3rd 1884.

OUR acknowledgment is due to Mr. Smith, of Dorchester county, for his timely present of choice peaches and splendid blackberries of a rare cultivated variety. What do not cultivation and skill perform?

HORTICULTURAL.

For the Maryland Farmer.

Seed-Breeding.

Any close observer will admit that stock-men have out stripped grain farmers. The former have advanced the most rapidly. They are the most wide-a-woke to-day. The grain farmer sows wheat and oats, and plants corn and cane, very little, if any better, than his father sowed and planted. Some improvement has been made in cotton and tobacco, but the improvement has been small. Far greater has been the improvement made by stock-men in hogs, cattle, sheep and horses. How much more valuable is the stock of to-day compared with that of fifty years ago; how much better in all points of excellence, except perhaps hardness! And how much greater is the advance here than among grains, vegetables and grasses!

This is the result of some defect in our farming. There is nothing in the nature of things which would forbid as great improvement in cereals as in animals. There is no conclusive reason why the grasses should not improve as rapidly and surely as the cattle and sheep that feed upon them. Corn and cotton are corn and cotton, it is true; but so are hogs and cattle hogs and cattle.

The improvement in stock raising has been accomplished by careful selection of the best animals for breeding purposes, and the bestowal of good treatment upon them and their offspring. In other words, greater merit in live stock is due to the use of the best progenitors and the best methods. This is the sum and substance of stock-breeding for improvement. Why not introduce it into the production of the grains and grasses? Why not have seed-breed ing? The best progenitors—the best seed; best methods—best cultivation. To the latter we have not been indifferent. We do cultivate better than we did fifty years ago. But for this we can not take unto ourselves righteousness for our own misdeeds, resulting in lessened fertility, have compelled us to cultivate better. The fact that the average annual yield per acre of the most important farm crops has increased but very little during the last half century would indicate that improved methods but little more than compensate for lessen-

ed fertility and that if we would make any material advance we must increase our efforts and likely open up an entirely new field of labor—giving attention to seeds as well as modes of cultivation.

It has been by the selection of the best progenitors that the greater improvement has been made in live stock. Better treatment has doubtless increased merit to a certain extent but its greatest work has been in preventing animals from retrograding; in retaining what selection in breeding had accumulated. And we would therefore naturally suppose that the greatest improvement among the grains, vegetables and grasses would be the result of seed-selection.

It is time that we have paid not a little attention to seed; but the object has not been gradual improvement by selection but the production of new varieties. In this way some advance has been made; but as it must always be to a great extent accidental and uncertain, we can hope for no results of great value till seeds are selected on the same basis that animals for breeding are selected. Perhaps we have not given two much attention to originating new kinds; but if we have devoted our time to this to the exclusion of patient selection of the best seed year after year, then we have given it too much attention.

It is supposed that wheat would be the most difficult grain of all to improve in this way on account of the comparatively great number of seeds required. But seed need not be selected for the entire crop; have a breeding patch. James Cheesman, of England, has done this and made a great success of it. He has in a few years improved the quality and increased the yield of wheat to an extent that would be hard to believe were we not furnished with conclusive evidence. And when we further consider that our finest wheat can be developed from a worthless looking grass growing on the banks of the Mediterranean, we can understand what seed-breeding has in store for us.

About seed-breeding there is nothing chimerical. It is no more difficult than stock-breeding. The two are almost exactly similar. The same discrimination and patience is required in each. Seed-breeding requires work and patience, it is true; but these constitute the price of all real gain, and in this case the gain will be

ample compensation. Select some—as many as you can—of the best grains each year for seed. Do not stop for one year, but steadily accumulate good qualities. It would not be surprising if necessity forced us to this before many years.

JOHN M. STAHL.

THE method of crossing corn is to plant the different kinds in adjacent rows, or hills, and to cut off the tassels from the kind that is to be improved as soon as they appear.

To destroy potato bugs the general custom is to mix one part of Paris green with from 100 to 150 or 200 parts of gypsum. If the Paris green is pure, the highest dilution is sufficient.

ARTICHOKES.—Artichokes have been grown for swine for several years at the Michigan Agricultural College. The method for arrangement is to have a small patch of artichokes convenient to the swine pens, upon which the breeding sows are turned daily in the Spring and allowed to harvest the roots for themselves. The crop is thus grown with very little labor, since it requires no harvesting, and the roots remaining in the ground all winter, it furnishes succulent food for the sows just when it is most needed and most difficult to obtain from other sources. Prof. Johnson, Farm Superintendent, is so well pleased with the results of this management that he is enlarging the artichoke plantation.

"If you are young, plant trees; if you are about to exchange time for eternity, plant trees; they will be a more enduring monument to your memory than the costly marble."—*Seed Time and Harvest.*

THANKS to Mr. Charles H. Clarke, Secretary for complimentary tickets to attend the coming brilliant meeting of the Northwestern Industrial Association on September 1, 2, 3, 4, 5 and 6th, 1884, at Minneapolis, Minn., All who wish to have an insight into the great resources of the North West should attend this exposition where will be displayed the various specimens of the sources of wealth in all departments of industry engrossing the attention of that enterprising and vast body of the American people.

Live Stock Resister.

Hog Cholera.

It is said on good Illinois authority that burnt or parched corn is an effectual remedy for hog-cholera. Make a pile of corn on the cobs and scorch or burn it well, then let the hogs have access to it at their pleasure. It has been tried and never failed. It was discovered by an accidental fire, when the parched corn was hauled out to a field where hogs had the cholera so badly that several died per day, and as soon as they had access to this supposed useless food, they got better and all got well who partook of this burnt corn.

The Milk and Beef Combination.

The attempt to combine *in one cow* the qualities which will fit her for a dairy cow and a beef animal at the same time, has proved futile, says Col. F. D. Curtis in the *New York Tribune*. I never could see any sense in supporting a big carcass for twelve or fifteen years, because it might bring, at the end of that time, when put in condition, twelve or fifteen dollars more than another body, which was calculated to produce just as much milk without the extra cost of supporting all this time useless flesh and bone. If cows were to be slaughtered at the same year in which they were born, this talk about extra weight might have some philosophy in it. The principle is wrong. Butter is not fat, neither is fat butter, although a great many people are trying to make out that it is. My ideal of a cow is not a small oleomargarine factory, but an animal endowed with the apparatus for making milk and real butter, and no useless muscle, tissue, or other physical organs for making fat or beef. Ordinarily, cows do not get food enough to keep up this double action, and when organs are not well supplied with nutriment, there is always a lack of vital force. A beefy cow is always a poor cow, and a good cow is never beefy. Fine spun theories may be written against my propositions, but they never will be woven into practical success. A cart horse cannot be a runner, and one fleet of foot is not made for draught.

Weights of Prize South-Downs.

From a recent lecture by Mr. Henry Woods, manager of Lord Walsingham's Merton estate, before the Institute of Agriculture at London, we clip the following: While the owners of the flocks of which I have just spoken, were scrupulously careful to maintain the purity of the breed, each aimed at a different type of animal. "Small and good" sheep were clearly Mr. Ellman's aim; Mr. Webb's, "large and good." Believing that large sheep were much the best, and would be the sheep of the future, I need not say how well Mr. Webb succeeded in producing animals of larger frame and greater weight than the South-downs of Mr. Ellman's day; while, at the same time, retaining the true type and all the essential points of pure bred southdown sheep.

It is, of course a recognized fact (or ought to be by every careful breeder of Southdown sheep) that the first and greatest point is to maintain extreme purity; to allow no cross to diminish the inestimable value of purity of blood. The direction in which the improvement in Southdown sheep is desirable, is uniformity of character, strength of constitution, excellence of wool, development of symmetrical form, mutton-producing properties, smallness of bone as compared with weight of meat, yet not such smallness as to prevent the carrying of an increased amount of flesh.

I may say that these are the points to which our attention has been always most especially directed in the flock of which I have now had the management for upward of thirty six years. Following the subject of increase of weight I find myself obliged to mention the three shearing champion prize Merton wethers of 1870, which averaged a little over 242 pounds each live weight. This I believe to have been the greatest weight recorded up to that time. Some persons, indeed, at the exhibition, thought that the great weight of those sheep suggested that there had been some cross in the breeding. I need scarcely say how utterly groundless was any such suggestion. At the late Smithfield Exhibition, Lord Walsingham's prize pen reached the unprecedented average for Southdown wethers of 251 pounds. This showed an increased weight of nine pounds per sheep over the weight of the champion wethers of 1870.

WE have in our day, says the *Tribune and Farmer*, been a pretty extensive flock-master, and have always found that if sheep in summer had plenty of good fresh grass and pure water they would do well. Once or twice a week they should have access to salt. They will be all the better for a good shade during the hot summer days. In winter we must protect our sheep from the severe storms; if stabled, good ventilation is required. A variety of food must be supplied them which must also be fed at regular times, with free use of water whenever they want it. With all these things, sheep can be kept without difficulty, and they will be found to be the most profitable industry on the farm. This is the healthiest country for sheep we ever saw, and we have in years past been something of a traveler. But there is one dreadful obstacle in regard to raising sheep in the Northwest. That obstacle should not exist. There is no need of it. The farmers and the country would be better off if it did not exist—even leaving out the sheep question altogether. That obstacle is in the shape of a dog, a miserable sheep-killing, mutton-eating dog.

Feeding of Horses.

The fattening qualities of corn as compared with oats, is shown by the greater amount of oil it contains, being nearly double that of oats. Therefore, if used as food for working horses, it should be given in these proportions. Equal quantities of corn and oats, should not be ground together. Such a mixture is dangerous. Oats should be given whole, unless necessary to bruise them for a special reason. Corn ground with the cob adds to its bulk, and does away with some objections to its use. Hay fed with the grain, helps the digestion of the latter. We should prefer not to moisten the grain—particularly if the animal is a greedy feeder. Bran mashes should be given at least once a week, in place of grain, or better still, carrots twice a week.—*American Agriculturist*.

YOUNG men in England have been advised to come to America to engage in raising mutton for the English market. It is predicted that the supply cannot keep pace with the increasing demand. Perhaps the young men of America will do well to consider such advice as being worthy their own attention.

THE low price of wool is causing more attention to be given to mutton sheep, says the *Tribune and Farmer*. One difficulty is that we have not enough really good mutton to create a demand. In England more is thought of mutton than of beef, and for the very best mutton prices are paid that would make American farmers stare. We grow beef equal or superior to any made in England. When we give equal attention to mutton we can excel in that as well as beef. The fine woolled sheep have received most attention from our breeders, and their mutton is not the best. —*Exchange*.

THE improved Leicester sheep is horn less; has a small head, bare poll; large, bright and prominent eyes; clean white face and legs; square, deep neck and shoulders; strait, flat, broad back; deep body; fine bones, and juicy, tender flesh, with the preponderance of fat more on the outside than the inside of the body. The fleece is fine, silky, glossy and white, of moderate length, often weighing ten pounds.

CLYDESDALE HORSES.—A few years ago the average weight of the ordinary horse, at four years old, was from 900 to 1050 lbs., with a value of from \$75 to \$100. As at present bred, it is a very inferior half-blood Clyde that will not weigh more than 1,100 lbs at three years old, and bring from \$150 to \$250, with no more cost for raising than the former—or than a bullock of like age. The superiority of Clydesdales as draft horses is generally admitted. The demand for them is so great that the capacity of the breeders to supply orders is taxed to the utmost. Their walking gait is a feature of great value, as enabling them to make good time with heavy loads. In this point they are superior to other breeds, and their splendid action, combined with size and bone will keep them at the head of the draft horses of the century.—*Dakota Farmer*.

AGRICULTURAL PRINTING.

Having all the various Cuts needed for embellishment, we are prepared to Print and furnish Premium Lists, Tickets, &c. for Agricultural Fairs, with dispatch, elegantly Printed and Illustrated, upon very reasonable Terms, as we make Agricultural Printing a Specialty.

LADIES' DEPARTMENT.

To Farmers.

"Neat be your farms; 'tis long confessed
The neatest farmer is the best;
Each bog and marsh industrious drain,
Nor let vile balks deform the plain,
Nor brushes on your headland grow,
For briars a sloven's culture show.
Neat be your barns, your houses sweet;
Your paths be clean, your door yards neat;
No moss the sheltering roof enshroud,
Nor wooden panes the windows cloud;
No sink drains should above ground flow,
Nor weeds with rankling poison grow;
But flowers expand and fruit trees bloom,
And fragrant shrubs exhale perfume.
Neatly enclose your garden round;
Smooth, enrich and clear the ground;
For if to taste and profit you incline,
Beauty and use you always should combine."

Recipes of Importance to Every Farmer.

The *American Agriculturist* in reply to the question by several persons as to how to "pickle cucumbers by the barrel for market," says:

"The best barrels are whiskey or alcohol barrels holding about forty gallons. Such a barrel requires half a bushel of salt, of the best kind, such as is used for dairy purposes. Remove one head of the barrel, lay in the cucumbers, sprinkling them with salt. They do not need much salt until the barrel is half full, after which it may be added more freely. When the barrel is full, replace the head, having it so filled with pickles that some pressure is required. Having headed it up tightly, turn the barrel on the side, fill it up with water through the bung-hole and bung up securely. Where the pickles are sold by count, keep an account of the number as the barrels are filled."

PRESERVATION OF BACON HAMS FROM FLIES.

—Our old friend, Mr. Peter Wood, of Prince George's, reminded us lately of a sovereign remedy for avoiding this pest without the resort to various troublesome and expensive processes. It is simply this: When the hams are removed from the pickle to be hung up and smoked, spread over every part that has no skin on it, of each ham, a thick dusting or rubbing in of black pepper—the red pepper has no effect on the fly, but black pepper is death to flies. When the hams are smoked well with cool smoke, they can be hung close together in a cool, dark, dry room, or left in the meat house as first hung up, if the house is suitable. This recipe was first published by the father of Maryland agriculture, —John S. Skinner,—and for over 50 years has

proven a safe remedy for protection of hams in the Skinner family, where a spoilt or fly-blown ham has never been known. Let our bacon-curers remember this the coming season and they will ever gratefully remember this publication.

HAY FEVER OR COLD.—Made so famous and almost desirable, by the eloquence of H. W. Beecher, who, because he has so long been afflicted with it periodically, has expended much of his inimitable wit and pathos upon its visitations, that the world seems now to call it "Beecher's Cold," can be prevented and relieved at once by a simple remedy. Almost everybody is a sufferer at this season of the year with this complaint. We met a reliable friend the other day, who, talking upon the "ills of flesh" and how simple remedies sometimes gave instant relief, remarked, "I have for years suffered with 'Beecher's Hay Cold' and accidentally found a simple remedy. As soon as I find the disease approaching, I snuff up the fumes of ammonia. That is I have ammonia in a small vial, and remove the stopper, give a snuff of it up my nostrils and repeat a few times or when I feel it necessary. The hay-fever or hay-cold is gone at once. If it has been suffered to run on, it will yield after repeated sniffs at the ammonia vial."

CHOLERA MIXTURE.—For more than forty years what is known as the "*San cholera medicine*" has stood the test of experience as the best remedy for looseness of the bowels ever yet devised. As was once vouched for by the *New York Journal of Commerce*, "no one who has this by him and takes it in time will ever have the cholera." Even when no cholera is anticipated it is an excellent thing for the ordinary summer complaints, colic, diarrhoea, dysentery, &c., and we have no hesitation in commending it. Here it is: Take equal parts tincture of cayenne, tincture of opium, tincture of rhubarb, essence of peppermint, and spirits of camphor. Mix well. Dose fifteen or thirty drops in a wine glass of water, according to age and violence of attack. Repeat every fifteen or twenty minutes until relief is obtained.—*Chicago Herald*.

ELDERBERRY WINE.—Take two gallons of berries and one gallon boiling water; let it stand 12 hours; stir occasionally; strain through a strong cloth; mix with 2 to 3 pounds of sugar, 1 oz. of cinnamon and $\frac{1}{2}$ oz ground cloves, to 1

gallon of juice, and let it ferment; when done fermenting draw off carefully in bottles and cork.

The above is from a lady in Baltimore, who has been successful in making this wine.

Publications Received.

"**YET A WOMAN.**"—Is the title of a new novel published by Houghton & Mifflin, New York. This book is truly worth reading, not because it has an original and striking plot, but for its many pleasing thoughts indicating the author's deep insight into the character of every-day men and women. It is a book that tempts one to mark sentence after sentence, or turn down almost every page for future reference and more deliberate perusal. It is one of the best of the lately issued novels of the day.

"**THE Cultivation of the Flax Plant for the Seed and the Fibre,**" is the title of a pamphlet published by Frank S. Shurick, of Fort Wayne, Ind., under date of June, 1884. This pamphlet contains a great amount of information of a practical character in regard to the growing of flax—the different methods—preparation of the soil—best sort suited to it—varieties of seeds, and other matters interesting and instructive to the grower of this textile. It also gives a concise yet clear history of the plant, its uses, and discusses its future possibility to become a leading product for profit in the near future.

PRACTICAL FORESTRY.—By Andrew S. Fuller. Orange Judd Company, New York. One needs to read the sub-title, in order to form an idea of the full scope and usefulness of the work. That which relates to the propagation of trees by various methods, planting and caring for them until of the most profitable size for their various uses, properly comes under the head of "Practical Forestry." As valuable as this practical portion of the work really is, the author has done the tree planters of the country a great service in bringing before them, in a compact form, a complete list of all the trees native to the United States. If this has been done before we have not met with it. Here the planter finds a list of the native materials at hand, and these are described in a brief and popular manner, which allows some opinion to be formed of their value and uses. The work, while it includes all our native trees, does not exclude all foreign species. There are some foreign trees, the value of which in this country has long been fully established, these are of course given place. Re-

sides, there are a number of others, but little tested, which may be useful on our soil. These newer, and probably promising trees, are known to the majority by name merely. Any description or information about them is scattered through volumes not included in ordinary libraries. Mr. Fuller has done well to bring these scattered materials together, and give such information and popular description as each appeared to require. Price, post-paid, \$1.50.

Much of the above we have taken from the *American Agriculturist*, because it has been well, and better said, than we could say. In addition we commend this little book to all who desire practically to bud, to graft and grow rare trees or shrubs. To young horticulturists we commend its study in the hope that they will practice more or less the suggestions of this able author and practical helper in all that tends to bless our land with rare trees and plants, and help restore the original forestry that a beneficent Providence once blessed us with, and which has by the untutored ignorance of our predecessors been ruthlessly destroyed.

THE DUTCH FRIESIAN HERD BOOK, VOL. III is a well printed, carefully prepared Herd Book, which is not only valuable for its illustrations, pedigrees &c., but contains an elaborate history of this famous breed, and many other interesting facts and statistics concerning it; also an index to the two preceding volumes with a list of transfers of all stock up to the date of the present volume.

CREAM SEPARATORS.—The De Laval Cream Separators continue to give the greatest satisfaction wherever used, and twenty-five hundred of them are now in daily operation in Europe and America, while the first made was in 1879.—Among the prominent users in this country are:

Mr. Theo. A. Havemeyr, Mahwah, N. J., who has had two in operation eighteen months, and both are as good to-day as when he bought them.

Ernest Kuehl, Lake Station, Ind., who ran one for twenty-one months without a dollar's worth of repairs.

C. W. Gould, Elgin, who began with one machine nine months ago, and now has fourteen in operation.

John and Joseph Newman, Elgin, have bought a dozen.

Mellen & Swan, Winnebago, Ill., have purchased seven.

The De Laval Cream Separator requires but

one horse power to each machine. It is easily run—requires only ordinary skill and intelligence—no more nor less than to make good butter and good cheese. The machine produces ten to twenty-five per cent. more and better butter than any other process. They soon save their cost, doing away with the use of ice, and leaving the skimmed-milk fresh and sweet. Address for catalogues Jos. H. Reall, President, 32 Park Row, New York.

Apology.—The readers of our Journal will excuse any inaccuracies and delinquencies they may detect this month in the MARYLAND FARMER, as the proprietor and senior editor, Mr. Whitman, is on his summer vacation at the North, and while enjoying the cooler atmosphere will take in "Bar-Harbor" with Blaine, visit the Maine State Agricultural College and attend the New England State Fair at Manchester, and perhaps other fairs on his homeward journey. Of all these scenes we hope to have a graphic sketch on his return.

THE ASHLEY PHOSPHATE CO., Charleston, S. C., is doing a good work in forming many compounded fertilizers upon the bases of the South Carolina Rock. This company must be greatly enlarging its business judging from the number of its advertisements, hand-books, almanacs, primers, and other documents setting forth the values of its fertilizers. As to the increasing popularity of its pure ground phosphate rock, reduced to an impalpable dust by "Duc Atomizer Mill," entitling it to be called "Floats, or Phosphate Dust," there can be no doubt. Persons buying fertilizers should try some of this company's many compounds, all having as the chief base or element this grand natural phosphate from the mines of the South Carolina Rock. Write to the company for circulars and try some of their mixture, especially their acid phosphate. See their advertisement in this number.

MONTGOMERY COUNTY, MD., is really a model county. Its progress has been remarkable. The population in the county in 1860 was 18,322; in 1870, 20,563; in 1880 24,759; the number of whites at the time of the last census being 15,608, and of colored people 9,150. The extent of improved land in 1870 was 162,143 acres; in 1880 it was 192,642 acres. The value of the farm lands rose in the ten years from \$5,480,452 to \$7,597,575. The corn grown increased in amount from 638,000 to 1,000,000 bushels; wheat from 309,000 to 616,000 bushels, and tobacco from 630,000 to 806,000 pounds. It raised, too, in 1880, 20,000 tons of hay, 156,000 bushels of potatoes, and \$66,000 worth of orchard products. And the most interesting fact in this connection is that Montgomery county buys more fertilizers than any other county in the whole United States, with two exceptions of the great counties of Lancaster, Pa., and Queen's N. Y.—the one containing farms valued at \$69,000,000 and the other farms valued at \$22,000,000. In 1880 Montgomery's purchase of fertilizers aggregated \$335,175; Lancaster's \$349,684, and Queen's \$636,058. Such account as may be given in a short letter of some of the influences which have aided in bringing the country up to its present standard of excellence will doubtless be of interest, and may be of advantage in other farming districts.—*Balto. American.*

FRAUD!—Some-body has been stealing the thunder of the celebrated Dr. D. Lewis, hence the following card.

Office of Dio Lewis's Monthly, Bible House, New York, 12th Aug., 1884.

MR. EDITOR.—*Dear Sir.*—I have at length gained possession of my magazine—Dio Lewis's Monthly. Hereafter all communications to its Editor or Publisher, and all business about my books, must be addressed Dio Lewis, Bible House, New York.

Those who have sent money to others for Dio Lewis's Monthly, or for his books, and have received nothing in return, will please communicate with me at once.

Very respectfully, Dio Lewis.

THE annual Montgomery County Horticultural Exhibition will be held at Sandy Spring, Md., on Thursday, the 11th of September, at 1 o'clock P. M.

CORN OYSTERS.—Six ears of sweet corn (those which are not too old); with a sharp knife split each row of the corn in the center of the kernel lengthwise; scrape out all the pulp; add one egg, well beaten, a little salt, one tablespoonful of sweet milk; flour enough to make a pretty stiff batter; drop in hot lard, and fry a delicate brown. If the corn is quite young, omit the milk, using as little flour as possible.

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